



Proceedings of
The Community Health Environment Survey Skillshare(CHESS-2)
Bangalore, July 26th - 28th, 2002

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“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed it is the only thing that ever has.”

..... Margeret Mead

for core lib
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1. AGENDA OF CHESS-2

DAY ZERO: 25-7-2002

Time	Activity
1:30pm-2:30 pm	Press Conference highlighting Elizabeth's work+ launch of poison Free Earth CD.

DAY ONE: 26-7-2002

Time	Activity
9 am - 10am 10am - 1:30pm 1:30pm - 3:00pm 3:00pm - 5:00pm 5:30 pm 5:30 to 7:30pm 8:00pm	Registration and Tea. Sharing the work of individuals and groups and expectations out of the skillshare. Lunch Lay Epidemiology-one day skillshare-Session 1: Small introductory presentations: 1) Elizabeth Guillette 2) Community Health Cell 5:00 to Tea Lay Epidemiology in 3 small-groups-workshop mode: Session 2 Cultural Evening + Welcome Dinner.

DAY TWO: 27-7-2002

Time	Activity
9am - 10:30 am 10:30am - 11:00am 11:00am - 1:30pm 1:30pm - 3:00pm 3:00pm - 4:30pm 4:30pm - 5:00pm 5:00pm - 7:30pm 7:30 pm 9:30 pm	Lay Epidemiology: Session 3: in small groups Tea Session 4: Final Session of Lay Epidemiology in small groups. Lunch. Campaign Context and Strategy: Presentations on campaign background: "The Way Ahead": Campaign Ideas Brainstorm A framework for a campaign strategy discussion Tea . Campaign Session -2: Small Groups interactions cum brainstorming on Toxics and Health campaign strategy with: -Surviving Radiation/Attacking UCIL-NPC -Pesticides and Health -Industrial Estates and Worker/ Community health -Mining and community/worker health onwards: Dinner Post Dinner Meetings in Small Groups.

DAY THREE : 28-7-2002	
Time	Activity
8:30am-10:30 am	Campaign Session-3: Back in the large forum: Sharing of small group learning of campaign strategy
10 am to 10:30	Tea
10:30 – 1:00 am	Campaign Session 4: Large Forum Campaign strategy on Draft Action Plan of year-2 begins
1:30 –2:30pm	Lunch
2:30 –4:00pm	Action plan and Roles and Responsibilities identified Statement of Collective Concern read out.
4:00 - 4:15pm	Tea and Snacks
4:15 to 4:45pm	Travel to Coles Park
4:45 to 6:30pm	Public activity... reaching out to Bangalore.

1.1 PROPOSED CHANGES IN STRUCTURE :

There were certain changes in this agenda proposed in a group meeting of some CHESS-1 participants, convened the morning of Day-1 of the skillshare. These were to the tune of increasing time of presentation on hotspots-issues and reducing personal introduction times. There was also some rescheduling of the small group sessions. Ultimately it was observed that all the sessions took their own time, new sessions cropped up instantly on Bhopal (Nityanand), Mining(Dr.Dave), Endosulfan(Dr.Syed) and E-Law(T.Mohan).

2.1 QUICK INTRODUCTIONS :

The participants spoke a few words about themselves and their work. For details of the quick introductions please refer the participants' list and profile attached to this document.(Refer: Annex-1)

2.2 SHARING DETAILS OF HEALTH ISSUES IN TOXICS HOTSPOTS

2.2.1 Patancheru,Andhra Pradesh--Industrial Pollution

Speaker : *Dr. Kishan Rao/ Narasimha Reddy*

Issue/ location : Industrial pollution in *Patancheru*, near Hyderabad (Andhra Pradesh)

Organisation : *Patancheru Anti-pollution Committee/ Centre for Resource Education*

Key issues:

The Industrial Development Plan of 1972 resulted in a loss of crops, cattle and the contamination of water and land with heavy metals, pesticides and solvents. This has had both environmental, health as well as economic implications.

Fourteen '*cheru's*' or small tanks used for irrigation in and around the industrial area have been polluted affecting 30 villages. There is an increased content of Arsenic oxide and the PH is 1.5. Initially the only drinking water source was the river. The community appealed to the government

for piped potable water. When this was finally sanctioned, the water that came through the pipeline was extremely toxic, unfit for human consumption. There was also a corresponding rise in the incidence of respiratory illnesses, diabetes and spontaneous abortions in the women. The medical doctors continued to treat the symptoms with expensive drugs (also produced and distributed by the large corporations) and refused to see the link between toxicity and deteriorating health of the community.

Some of the health effects are listed below :

- Carcinoma Thyroid (Hypothyroidism, Hyperthyroidism and Myxedema)
- Hyperkeratosis - characterised by the thickening of the skin due to arsenic poisoning.
- Hypo-pigmentation or lightening of the skin
- Contact dermatitis
- Neural chord deformities are a result of increased levels of arsenic in the blood. Test results of one family whose child was born without eyeballs showed that there was 0.6mg of arsenic in the father's blood, 0.4mg in the mothers' blood and 0.3mg in the child's blood sample.

The environmental condition had an effect on the household income as well. In one of the affected villages 90 cattle died of toxic poisoning which resulted in an acute financial loss.

Action taken :

Patancheru being a small village early on, had no NGO support. The villagers initially organised themselves to fight for the rights of their community.

- A big procession was organised in front of the legislative assembly voicing their demands to detoxify their land and water.
- The matter was taken up in court and a community representative argued the case . Without adequate legal expertise and aid the community was unable to win the case.
- The community also used the media to highlight the issue.
- In 1990 a case was filed in the Supreme Court. At this time the issue was well documented by the media, university students and Dr. Kishan Rao. The data collected and analysed showed that the liability of the company amounted to 132 crores. The case is still pending in the court.

2.2.2 Warangal, Andhra Pradesh - Pesticide Deaths

Speaker : Mr. Narshima Reddy

Issue/ location : Pesticide use in Warangal

Organisation : Centre for Resource Education

A survey was conducted in Warangal district in January. The team consisted of representatives from Toxics Link, Sarvodaya Youth Organisation, Community Health Cell and Mr. Narasimha Reddy, Center for Resource Education. The findings showed that

- There were 1 to 2 deaths per village.
- 10 persons were hospitalised per village.
- The farmers die either due to exposure to pesticides or by ingesting pesticide due to emotional trauma.
- After Guntur, Warangal is the second highest pesticide intensive district in India.

2.2.3 Kasargod, Kerala-- Pesticide Pollution

Speaker: S. Usha

Issue/ Location : Massive Endosulfan(Pesticide) Poisoning in *Kasargod*

Organisation : *Thanal Conservation Information and Action Network*

Key issues:

- The approach of the Agriculture department towards the pesticides issue was against the best interests of the farmer.
- There was a strong need to focus on fertilizers in addition to pesticides as the former form the primary problem.
- There is a need to link the pesticide issue not just with the environment but with the health of communities as well.
- Endosulfan has been used for the last 25 years while the permission granted for official use was only in 1983. Recent evaluations show that this chemical is not suited to the topography of Kerala. However generating proof to support this argument is difficult.
- Children exposed to Phorate in banana plantations in Wayanad have died. Similarly in Iduki 40 women plantation workers were hospitalised. This case was termed as “mass hysteria” by the doctors.
- In 1958, following a Folidol related accident in Kerala, the Indian Insecticide act was passed. However the Act largely focuses on trade, transportation and related issues rather than use and impact of the insecticides.
- A survey of farmers in Palghat showed that in the 60s it was not the farmers who were eager to use chemical pesticides, but it was thrust upon them.

2.2.4 Rajahmundry, Andhra Pradesh-- Stone Crushing

Speaker: *Rajendra Kumar*

Issue/ location: Stone crushing in *Rajahmundry1, Andhra Pradesh*

Organisation: *Mines Minerals and People (MMP)*

Key issues:

The dalits working in the quarries in the East Godavari district are faced with a range of health and occupational hazards. There are 55 stone crushing plants, in the vicinity of which numerous families were resettled. The dust that is generated from stone crushing causes workers and their families to vomit blood in the morning. Instead of considering silicosis as a serious health condition in the area, the doctors seem to be solely looking for diseases like TB and cancer . The patients are asked to eat healthy food. However this has no roots in reality, as these people are unable to afford even one square meal a day.

Action taken:

- In the recent election along with ballot paper small slips of paper demanding for a clean

environment and water were also deposited into the ballot boxes.

➤ The people *gheraoed* the collector with 4 demands:

- Provide a green belt around the mines
- A high wall around the stone crushers
- Constant watering of the plants so that the dust does not rise
- Building a dust trap

Impact of the movement so far:

Stone crushing work happens only during the day and not for 24 hours. Some concessions are made during certain special occasions. The media has also supported the movement, the community's need is legal aid and support from other groups.

2.2.5 Jadugoda, Jharkhand-- Uranium Mining and Dumping

Speaker: *Ajitha Susan George*

Issue/ location: Uranium Mining/dumping in *Jadugoda, Jharkhand*.

Organisation: *Mines Minerals and People*

Key issues:

- In 1996 a study was conducted by MMP to assess the impact of radiation in Jadugoda. At that time there were no trained doctors in the area. The study was done in 10 villages. The data collected as a result of the door to door survey has not yet been analysed and compiled. However this created awareness among the people of the community.
- The people affected were miners and those staying in the adjacent villages especially the women.
- There were a number of sources of contamination
 - The tailing pond.
 - The stones used for building houses were irradiated as indicated in the readings of the Geiger counter.
- Some of the health effects were as follows:
 - Spontaneous abortions
 - Neonatal and infant deaths
 - Infertility
 - Down Syndrome
 - Thalassemia
 - Cancer
 - Mental illness
 - Deformities

Health problems were treated independently and were not linked to radiation.

2.2.6 Jharkhand--Coal Mining

Speaker: *Gemma Mendez*

Issue/ location: Coal Mining in *Jharkhand*

Organisation: *Mines Minerals and People*

Issues in the coal mining belt:

Initially most of the issues were related to the effects due to coal mines . However in the recent past there has been a shift to open cast mines that are detrimental to the environment. Some of the concerns:

- Increased unemployment as most people have been forced to take voluntary retirement or have been retrenched as a result of mechanisation.
- Excessive mining has resulted in the loss of habitat and has affected tribals who continue to struggle for their livelihood.
- A "Tablet regime" with a heavy concentration of drugs has been unleashed to combat exposure related illnesses. As the indigenous people can afford to eat only one meal, most of these drugs pose further complications, as the entire drug regime is supposed to be supplemented by nutritious food several times a day.

2.2.7 Cuddalore-- Industrial Pollution

Speaker: *Rajaram*

Issue/ location: Effect of chemical industries in *Cuddalore, Tamil Nadu*

Key issues:

The State Industries Promotion Corporation decided to promote chemical industries and as a result Cuddalore has over 50 industries. Until 1995 there were no effluent treatment plants anywhere. It was difficult to analyse any air/water samples, as the companies would bribe the concerned individuals and dilute the sample until there were no traces of effluents.

Responding to a complaint made to the State Human Rights Commission, the SHRC recommended that the people must be relocated away from the area.

Pondicherry alone has 4,500 industries and over 300 of them are chemical industries. All these companies have been pumping their untreated effluents into the nearest water bodies. So far there have been no health studies or surveys. When the Tamil Nadu Urban Research Institute visited Cuddalore for preliminary data, they were threatened by certain corporations and were forced to give up the study.

Reactions:

- There was a concern as to what would happen to the employees if the Pollution Control Board ordered that a company to be shut down. According to Mr. Rajaram the company is liable to pay compensation to its employees.
- The other concern was the extent of power and authority of the committee who would hear the case. According to Mr. Rajaram, the Government can give an order but it is up to the company to follow it.

Speaker : Shisir Tripathy

Issue / Location : Industrial Pollution / Angul

Organization : Direct Action Group

Key Issues:

Rapid Industrialization in Angul Talcher area of Dhenkanal district of Orissa has resulted in a catastrophe as far as the environmental situation in the area is concerned. Depletion of natural resources and degradation of environmental conditions has brought in immense miseries for people of Dhenkanal, Angul, and Balasore Cuttack district on the banks of the river Brahmani, the 2nd largest in Orissa. The loss of natural resources, loss of occupation of thousands of fishermen and farmers, miseries due to health hazards and displacement far outweighs the development. The prime industries in the in and around areas responsible for this deplorable condition are Talcher Thermal Power Plant, Orichem Ltd., Fertilizer Corporation of India Ltd., Mahanadi Coal Fields, Smelter and Captive Power Plant of National aluminum Company (NALCO).

- ◆ Health Hazards – Due to pollution of air, water and the killer fluoride the villages here suffer from an unending list of diseases, like Upper respiratory disorders, fluorosis, various stomach ailments and skin diseases.
- ◆ Pollution of Nandira and Brahmani – NALCO and Talcher Thermal power plant dispose around 2500 tons of ash daily. The Fertilizer Corporation of India releases 2 crore litres of effluent into the Nandira. These polluted waters of the Nandira flows into the Brahmani, the lifeline of Denkanal district, turning the Brahmani into a virtual river of death
- ◆ Contaminated Ground Water – Apart from surface water the ground water is also contaminated. Around the smelter plant of NALCO, the ground water is severely contaminated by the killer fluoride.
- ◆ Plight of Fisherman – Due to the pollution of the Nandira and the Brahmani the aquatic life in these rivers has almost perished. Due to unavailability of fish in the rivers, thousands of fishermen have lost their only occupation to pollution.
- ◆ Agriculture ruined – Agriculture is dying a slow death in the Angul Talcher area. The irrigation water, which is used from the Brahmani, has rendered the land unproductive. The soil is losing its fertility. The farmers who were cultivating a range of crops, are now cultivating only groundnut and paddy.
- ◆ Displacement – Displacement due to coal mining and industrial activities has created immense socio-economic problems.

Action :

- Field action to promote awareness
- Cultural action to educate people and the hazards of pollution
- Research and studies on
 - Impact of pollution on human health
 - Impact of pollution on crop and vegetation
 - Impact of pollution on animals
- Documentation and communication

2.2.8 Kodaikanal-- Garbage Dumping

Speaker: *Meena*

Issue/ Location: Garbage contamination in *Kodaikanal*

Organisation: *United Citizens Council of Kodaikanal*

Key issues:

The garbage problem in Kodaikanal is a result of the accumulation of non-biodegradable waste generated as a result of the growing industrial tourism in this town. The present garbage dumping site is located slightly above the shola, which leads to the contamination of the perennial stream below, the Manjular dam and subsequently the drinking water of 2 villages in the vicinity. This also poses a huge threat to the forests and biodiversity. Currently the waste is being disposed by open bin burning of mixed wastes. This puts the health of workers and citizens at risk. It is evident that the lifestyle of the richer sections of society generate this problem while it is the poorer sections that pay the price.

Action

- The organisation filed a petition in court and managed to get a stay order on the garbage dumping site, but the municipality's excuse is that they do not have alternate dumping sites.
- The community demanded that a micro level-composting unit for every four wards be installed.
- The organization facilitated incentive schemes. For example if you return a plastic bottle to the vendor you get a small refund.

2.2.9 Eloor/Edayar-- Industrial Pollution:

Speaker: *Purushan*

Issue: Chemical contamination in the *Eloor-Edayar* belt

Organisation: *Periyar Malineekarana Virudha Samiti*

Organisation: *Periyar Malineekarana Virudha Samiti*

Key issues:

- For the last 15 years the struggle has been on in the Eloor Edayar belt. There are a total of 230 factories, 12 big and 28 small. Of the total 125 are chemical factories. Some of the prominent ones being FACT, TCC, CMRL, HIL. The DDT produced by HIL for the last 40 years has ruined the fields, has contaminated the soil within a 2km radius of the factory and has contaminated the fish in the surrounding water bodies.
- The effects of the radiation from IRE were also seen in the villages. Of a total of 110 deaths per year in one of the affected gram panchayat villages, 20 members died of cancer, 35 of heart attacks, and 15 of kidney failure.
- There has been a significant reduction in biodiversity as well. A number of useful plants, and butterflies have become extinct. 12 varieties of fish have also become extinct.
- The Jarosite waste being dumped by Binani Zinc in Edayar in the crude pits has contaminated the water table in the surrounding areas.
- There is a concern for the occupational health of the factory workers of the FACT factory. Statistics show that of the total of 55 deaths between the year 1999 and 2001 there have been 35 heart attacks, 10 persons died of cancer, 3 of liver failure and 2 of kidney failure. This is reason enough to believe that these deaths may have been caused due to exposure to hazardous chemicals.

Action:

- The panchayat of one of the affected villages attempted to close down the factory of Merchem Limited.. The case went to court where the decision was against the people of the village. They have thus lost faith in the legal system. The group feels that there is a need for an extensive health-survey to be done in the affected villages.

2.2.10 Dakshina Kannada, Karnataka-- Industrial Pollution

Speaker: *Upendra Hosbet*

Issue/ Location: *Dakshina Kannada Parisara Saktha Okkuta*

In 1995 the Karnataka government sanctioned 35 mega industries . Some of the large projects were Cogentrix, Nagarjuna Power plant, Nagarjuna steel plant. The community's resistance in the area accounted for 10 such plants not materializing.

Lessons Learned:

- The fishermen who were affected due to the contamination of the water by the effluents of MRPL, organised themselves to demand that the company be closed down. The government of Karnataka called a meeting of all parties involved and passed an order in favour of the fishing community. However today the order is ignored and an official in the company has gone on record to say that he could not understand the proceedings of the meeting as they were in Kannada. This set in a belief amongst the locals that the Government and Industries are not to be trusted.
- To test any sample of water / soil for the levels of contamination, the company's permission is required.
- The community is faced with a shortage of scientific labs required for testing of samples. The only lab is in MRPL.1
- The scientific community is hand in glove with large corporations and does not disclose information to the concerned community.
- All reports and studies that come out of big institutions are tailored to the needs of large corporations.

The result is that all water bodies in the area are contaminated and the drinking water is no longer potable. There is no effective garbage disposal and treatment system as a result of which the soil has also been contaminated.

2.2.11 Nellore, Andhra Pradesh-- Mica Mining

Speaker: *Mr. Gangi Reddy*

Issue/ Location: MICA mines in *Nellore* district of *Andhra Pradesh*

Organisation: *Rural Reconstruction and Development Society(RRDS)*

Key issues:

- There are 20 Mica mines in this district affecting over 3 to 4 thousand people. Most of these people are dalits and tribals who are temporary workers.
- Some of the common illnesses seen in the community in the recent past are asthma, tuberculosis

and a decrease in eyesight.

- The factory workers are at a loss as they are unable to avail of any medical aid or compensation, as they are temporary workers.
- They work from 8am to 5pm, the men earn Rs 50 while the women earn Rs.30. They do not have any alternative employment.
- The stone crushing units of white quartz result in air and water pollution in the community.

2.2.12 Kodaikanal, Tamil Nadu-- Mercury Dumping

Speaker : Navroz Modi

Issue / Location : Mercury contamination in Kodaikanal.

Organisation : Greenpeace Environment Trust.

Key Issues:

The contamination of mercury in the environment, the health hazards faced by workers and indirectly exposed people in Kodaikanal is a result of negligent practices and double standards of the "Hindustan Lever Limited Thermometer Plant (defunct since 2001). This thermometer plant exported around 165 million thermometers all over the world. In the process the plant has emitted close to around 15 tons of mercury, while still operational. This dumping has resulted in mercury seeping into the soil, water and also people in and around Kodaikanal. The safety measures at the plant were deplorable and non-existent. Tests conducted just outside the factory indicated the presence of mercury which was 600-800 times higher than the permissible level. Even after closing down the scrap left behind has been sold. For instance broken thermometer wastes were sold to rag pickers for glass. According to his estimate around 90 tons has been circulated and sold in a similar fashion in Tamil Nadu and Karnataka. "As per corporate laws it was mandatory for the company to maintain health records. The fact that a clean chit as far as health is concerned had been given by the company doctors to almost all workers indicates that the records have obviously been fudged" said Mr. Modi. The symptoms of mercury poisoning are diverse and often chronic. Also there is no clue whatsoever on the reproductive effects, especially amongst the 2nd generation victims. A process of scientific learning has been initiated. Their struggle and focus has been directed towards rehabilitation of workers from a health as well as economic perspective and in a larger picture a clean up of the environment in and around Kodaikanal.

2.2.13 Gujarat-- Industrial pollution

Speaker : Michael Mazgaonkar

Issue / Location : Industrial Pollution, Gujarat.

Group : Parayavaran Suraksha Samiti

Key Issues

Michael spoke broadly of the "**Golden Belt Corridor**" which extends from Mehsana in the North to Valsad in the South. This belt also has the unenviable honour of being called "**The Chlorine Corridor**". This belt has several polluting industries including petrochemicals, dye industries, cement factories and other such facilities. He highlighted several examples to talk of the havoc these

industries were causing from an environmental as well as human perspective. The Vapi Industrial Estate has around 350 industries. The effluents of all these industries pass through a common effluent treatment plant. In spite of this the treated effluents which flows into the *Damanganga* river, are contaminated and scientific studies have revealed the presence of several persistent organic pollutants in addition to several other toxic substances. The river is a source of drinking water for several adjoining districts. This dumping has also resulted in the ground water getting contaminated. Many wells in Vapi were contaminated, with the water having a definite reddish tinge to it. Tests revealed that Mercury was found to be present in the water, 1000 times higher than permissible levels. Surveys in the village of *Kolath* revealed that there were 23 (much higher than the usual rate) people who were either suffering or had died of cancer. He also highlighted the contamination caused by effluents from the Nandesari Industrial Estate which are released directly into the Gulf of Khambat. Along the way the same water is used for irrigation and hence these toxins enter the food chain. He also spoke about a survey being conducted by a Phd student from the M.S. University at Baroda, whose studies revealed high levels of toxins in vegetables grown in the area.

2.3 SPECIAL PRESENTATIONS:

2.3.1 DR. ELIZABETH GUILLETTE, Author: "Performing a Community Health Assessment"

Issue / Location : Community Health Assessment, Yaqui Valley, Mexico.

Organization : University of Florida.

Key Issues

- Exposure to toxins through aerial pesticide spraying
- Dispelling doubts on the toxicity of pesticides, which were initially perceived by many locals to be harmless.
- The varied and drastic health effects with regard to this spraying.

As far as the health effects are concerned, while Dr. Guillette did mention that many of these health related problems were found all over she did lay emphasis on the fact that this prolonged spraying had far more severe effects on the local people in comparison to other places. Infertility, Gynaecological problems, problems during pregnancy, upper respiratory disorders, Cancer and many more health problems were rampant amongst the local people of the valley. She attributed these problems purely to the spraying, as there was no industrial activity of consequence in the immediate vicinity of the valley. Amongst the locals, children were especially susceptible for obvious reasons. Common problems amongst children were mental and physical retardation, upper respiratory disorders especially Asthma, Cancer, wide set eyes. She also elaborated on how they were exposed right from a pre-natal stage. These toxins (especially POPs) tend to accumulate in the fatty tissues of the body. During pregnancy a lot of fat is used to supplement the developing baby and hence they are exposed right in the womb. Even after birth the toxins are passed from mother to child through breast milk.

Actions

She conducted a comprehensive community health assessment targeting children. In this she used many creative methods, which while keeping the interest of the participants, also managed

to provide valuable and emphatic insights. She conducted these tests in familiar surroundings. In her study some of the innovative as well detailed fact finding methods used by her were: -

- Amongst the age group of children between 4 & 5 years she conducted a few tests namely
 - A game of ball involving throwing and fetching from a distance of 3 meters. The lesser-exposed children, compared to valley children fared much better at catching it.
 - Dropping raisins in a bottle primarily to test for concentration and hand-eye coordination. The result was the same. What was disturbing was that even after repeated attempts the valley children could not perform the task and lost interest in the game.
 - Simple games involving running, in which she found that the valley children seemed to have a time threshold of around 45 seconds to 1 minute compared to the lesser exposed children indicating low levels of energy / stamina.
 - Walking on a narrow plank for a distance of about 30 feet, turn around and get back. Not surprisingly the valley children, in comparison to the other lesser-exposed children fared badly in this too, as many of them either could not maintain their balance while walking or while turning around.
 - Amongst all her tests the one, with rather shocking results, was when she asked the children to draw pictures of people. While the lesser-exposed children did draw pictures, which were normal for their age, the pictures drawn by the valley children did not bear a vague resemblance to humans. Even after repeated attempts the results were the same.

All these tests, called rapid community assessment, which she had conducted on the behest of the Mexican government, was a clear indicator of the human health (especially the 2nd generation studies) situation at Yaqui valley. Her tests did manage in convincing authorities in reducing their usage of pesticides in the region, and a de-facto ban on DDT.

A few questions raised were :-

- Has her study at Yaqui Valley been published?
 - A) Her study has been published in the "Environment Health Journal" one of the most prestigious journals.
- How did she relate the problems at Yaqui Valley to pesticides.
 - A) The primary contaminants, exposure indicated the cause to be pesticides. Also the fact that there is no industrial activity of consequence in the vicinity removed any kind of doubts as far as this issue was concerned.
- Which are the pesticides used there?
 - A) The groups of pesticides used there are Organochlorines, Organophosphates and Pyrethines. She also added though that health problems were due to multiple exposures and one single pesticide could not be singled out as the cause.
- Did the locals initially suspect any problem?
 - A) While the locals did know there was a definite problem, they weren't sure about the cause. It was at this time, at the behest of government, that Dr. Guillette stepped in.
- Is there a standard volume of pesticide sprayed over the valley?

A) While the concentration varies, currently the usage has been reduced as the area is going through drought condition.

Dr. Ravi Narayan, CHC, had a few comments to make regarding Dr. Guillette's study, especially, the contrast between her approach and conventional epidemiological approaches.

- Her method unlike traditional studies is consistent and applicable for everyone.
- It is primarily health and not disease oriented
- It is fun and allows a lot of room for creativity. It also encourages the sustained participation of children, which is very important.
- It is community based and not individualistic.
- Study based around children – following the maxim “catch them while they are young” and also the most severely affected of the lot.

The request for a community health assessment came from the government and was not initiated by Dr. Guillette.

2.3.2 DR. SK DAVE, Director- National Institute of Miners' Health, Nagpur.

Key issues:

Mining is the oldest and probably the most hazardous occupation. The injuries caused are dangerous and often fatal.

In 1947 the first report in India on silicosis was brought out. Silicosis has been well studied and documented, and often cited as the most common problem faced by miners and communities affected by mining.

In the Cuddappah district in Andhra Pradesh, the asbestos industry has had adverse effects on workers health and environment

Another study by Dr. Dave focussed on the neuro-psychological problems and muscular effects of exposure to manganese mining.

Action:

Dr Dave is the director of the institute and he takes up research, education and training programmes. He would be willing to share the reports with anyone who is interested. He feels strongly about using the media to raise issues, by raising questions in parliament to put pressure on the government. He admitted that the studies done so far did not focus on women and that was an area that needed to be looked into.

2.3.3 DR. SAYEED, Director- National Institute of Occupational Health Issue/ location: Endosulfan study in Kasargod

Concerns:

- Endosulfan acts by inhibiting the neurotransmitters that have a modulating or calming effect on the nervous system. In an experiment when dogs were exposed to Endosulfan, they became hyper-excitable while responding to the smallest of stimuli. Their condition deteriorated to a point where they had to be put to sleep. The question that arose was if Endosulfan could be responsible for emotional imbalances that resulted in suicide.
- Dr. YS Mohan Kumar , a general practitioner in Kasargod found many abnormal cases of cancer, birth defects liver diseases and suicides. This was published in a report in the Down to

Earth Magazine, following which there was a *suo moto* action by the court to investigate further. The process of gathering and presenting evidence (also with reference to the NIOH study on Endosulfan affected in Kasargod):

- **Denominator** - Any figure should be expressed with a denominator. It must answer the question "out of how many".
- **Controls**- it is important to have a comparison group or a reference group which would be a group of people of similar socio- economic status who are not exposed to the chemical.
If school children are chosen as the target group, the age may be difficult to find out as most parents are not aware of the exact age of their child. This was the case in this study. The reference group were children of the same age from a non-exposed village 20 km away.
- **Individual Biases**: In this study the doctors did not know what to expect in terms of the effects of Endosulfan. The laboratory analysis was done independently which also made sure that there were no biases.
- **"In excess"** - It is important to show that any symptom or illness is manifested in excess to the normal rate of incidence. The findings showed Endosulfan to be present in the soil of both the study and the control villages, but it was 10 times higher in the village under study.
- In addition to the data, satellite pictures of the village were also taken and the report was presented to the NHRC.
- **Precautionary Principle**: emerged as a powerful principle during the Rio Declaration during the Earth Summit of 1992. As it is difficult and in some cases impossible in bioscience to establish cause and effect beyond doubt, the burden of proof falls on the polluter and not on the affected community, to bring forth evidence that proves that his product or process is not the cause of health problems..

Reactions:

- There was a concern that all studies by NIOH and other academic and scientific institutions must be freely available to the public. According to Dr Sayeed, the studies were handed over to the Government and only the concerned ministry could make it public. Dr. Ravi Narayan brought to our notice the ICMR ethical guidelines, recently drafted, clearly state that information, must be shared with the local communities.
- Local groups were interested to know if the NIOH would take up studies based on their concerns. Dr Sayeed said that he was open to the idea but the scientific advisory committee in their meetings would make the final decision. The local groups would have to collect preliminary data to support their concerns and present it to the NIOH.
- Some groups (Harihar polyfibers/ Angul (NALCO)) wanted to know if old studies could be reopened. Dr. Sayeed had no objection to that.

2.3.4 T MOHAN, Advocate Mohan & Devika Associates, Chennai.

The Legal Options Available to Communities in Distress are as follows:

1. *Citizen's complaints*

The complaints are to be made to the pollution control board. According to the air and water act

if there is no action taken within a period of 60 days, the individual or the community can prosecute the company. The Pollution Control Board will be obliged to furnish all the relevant documents.

Litigation is not a viable option in most cases, as decision-making is far removed from the community. He attributed this to be the primary reason for peoples' movements losing momentum when they enter the courts. However, Prosecution might probably get media attention but not much more

2. *Civil Liability*

This is a cumbersome procedure and takes time, effort and is expensive. The court fee amounts to 7.5% of the claim. Section 91 of the CrPC, which deals with public nuisance, is sometimes used. However it is not particularly effective. Lawyers need to be innovative and break out of the set norms and claim for punitive damages.

The Public Liabilities Act, The National Environmental Tribunals Act, 1995 (not yet functional) are the options for legal redressal.

Adv. Mohan felt that there was a need for more activist groups to work at the policy level to help create alternative structures and legal frameworks. Today the courts are ill equipped to handle the issue of remediation and shift the responsibility to the Pollution Control Board who turns to the industry.

Activist groups need to challenge these practices as well.

3.1 PESTICIDES AND HEALTH

To begin with the **objectives / specific needs** of the participants were listed out.

- To learn the techniques of Impact assessment of health hazards due to pesticides and to be able to analyse the issue in the context of community health.
- To look at the effect of pesticides in a broader context, on not just human life but also the effect on livestock. To understand the other issues that emerge from pesticide usage that is environmental, health, livelihood, employment issues etc.
- To identify effective education and awareness programmes for the community
- To search for alternatives. One of the major concerns expressed was how to deal with public perception of pesticides, as there is a strong belief amongst farmers that pesticides are the only solution.

The Process

The process was largely interactive. Dr. Elizabeth played the role of the facilitator and threw up some questions from time to time. The objectives evolved out of the key concerns of the different groups. Some of the questions that were reflected upon were:

Ø What is the main concern of your community?

Ø Who are you doing the study for? Have they expressed a need for a study?

This was followed by a discussion about the differences between the peoples' perception and the NGO or the researcher's perception. It was established that any study must reflect the needs and views of the community.

This was followed by a session on Lay Epidemiology facilitated by Dr.Elizabeth

Lay Epidemiology:

- The importance of research as an potent tool that strengthens the case of the activist and helps gain community support was discussed.
- The importance of **focus group discussions** to gather basic information and identify emerging issues and concerns of the community. To understand how focus groups operate and why they are important, the group further divided themselves to discuss “what they liked most and what they hated most about their jobs”

The methodology and process of conducting a community health survey was discussed in detail. Some of the points discussed are elaborated below.

■ **Selecting a study group and a control group**

The control group should be chosen from a similar geographical region with similar conditions but free of key pollutants being researched. A manageable sample size is 100. The number of respondents in the control group should ideally be the same or more than the study group. A simple and effective method of sampling is random sampling. One way to achieve a representative random sample is by dividing the geographical area on a map into squares or sections and choosing a specific number of respondents from each unit.

The questionnaire should be simple and the questions short. The questions must not reflect the biases of the researcher. The consent of the community is important and confidentiality is to be maintained.

- **Diet surveys** are very important to assess the nutritional status of the community vis-à-vis health.
- **Ethnographic data** can be collected in several ways. One of them is a ladder method where a ladder is drawn on a piece of paper people are asked to position themselves on the ladder and then change their position (either higher up or lower down) after exposure to the relevant pesticides.
- **Analysis:** The most suitable computer programme is the *Statview*. Data can be analysed as percentages, charts and graphs can be prepared. The final analysis can be presented back to the community, to the study group as well as the control group. Further strategies can be worked out with the community. The findings may be published in order to make it accessible to all.
- **Role of the media:** Involving the media is vital to spread the message and ensure a better outreach.

The way ahead:

- Analysis of the weak points in our campaign work and ways of making ourselves stronger [community mobilization, for example, is one such area]

- Proving that higher incidence of health problems prevail in a particular place because of toxins, and how to highlight such evidence [*prima facie* evidence of health impacts]
- The subsequent fights [with the industry, with the government, legal battles etc]
- Issues of liability, compensation, remediation etc.
- Healthcare interventions
- Policy level changes

The pesticides group began its discussion by taking up the first point of the suggested format. Community mobilization and participation issues were discussed by various grassroots groups. It was felt that awareness regarding the impact of pesticides, especially the short-term, acute effects were known to farmers, and the problem is usually with regard to eliciting participation on a sustained basis, promotion of alternatives and 'the need to make connections' [connection between what one notices as a particular symptom to the pesticides being used, long term impact connections, connection between what seems to be happening in one micro-location to what is being manifested in another not-so-distant location etc.]. In certain places, folk-cultural means were adopted but not very successfully. In Kasargod, regular work has been hampered by the 'tourism' that the Endosulfan campaign has resulted in. Village level workshops seem to have helped in Punjab, which made connections between groundwater contamination and the use of pesticides. Sometimes, using experts for engaging in a discussion with farmers helps. Entomologists were able to hold the attention of farmers in Warangal and elicit higher participation. Farmer-to-farmer extension and revival of traditional practices helped in Andhra Pradesh.

It was endorsed that lack of information and poverty are the two reasons, which inhibit better participation. Sometimes how you 'play' with information, and what you choose to highlight or hide matters affects the quality of a study.

The group then moved on to a discussion on whether they should be talking specifically about short-term and long-term strategies. Long term in this case would be to look at the pesticides issue within a context of sustainable agriculture, and look at the elimination of pesticides through a shift in cropping patterns. It was decided to use '**Pesticides and their Health impacts**' [both acute and chronic] as the ideal plank for launching a campaign considering the power of health to mobilise both the producers and the consumers. The issue of pesticides in public health though important, was decided to be tackled at a later stage, while using pesticides in agriculture as the launching board.

The following ideas emerged as the possible activities/strategies that could be taken up:

1. Using the upcoming Pesticides Meeting to detail out the policy/legislation changes that one wants to bring about
2. Creating and establishing prima-facie evidence through surveys, studies and fact finding teams
3. Creating a Pesticides Hotspots map of India, pointing out to both suicides and poisonings due to pesticides
4. Looking at pesticides' impact as a violation of human rights.
5. Preparation of status reports / dossiers [including media coverage] at the state-level for

- atleast those states represented in the workshop
6. Influencing ICMR and other institutes to make health studies on pesticides as their priority
 7. Creating data banks of alternative pest management practices, including in local languages
 8. Videos of the impact, photo exhibitions etc. Suicides & Pesticides
 9. Trying to establish the links between suicides & pesticides in terms of impacts like chemical-induced depressions; studying the suicides phenomenon some more
 10. Looking at health impacts on children and pesticides more closely and highlighting the same
 11. Looking at the health impacts of pesticides on women – reproductive and fertility aspects in particular
 12. Networking amongst groups and with other allies [lawyers, medical professionals] and to bridge links between various levels of campaigning [for instance, getting cashew imports from India banned in the US, with help from allies there]
 13. Broadbasing the campaign to include consumers and conservationists
 14. Exposing the corrupt links between the industry and the government
 15. Inventorising of stockpiling of obsolete pesticides
 16. Highlighting other scandals related to transportation, pesticide containers etc.
 17. Taking up more exposure studies
 18. Addressing the issue of Illegal trading and smuggling
 19. Addressing research and extension institutions to take up work related to alternatives, and against pesticide use
 20. Providing Inputs into the preparation process of National Implementation Plans of the Stockholm Convention.

It was also felt that the campaign should actively address the issue of transition for farmers, from pesticide use, to non-pesticidal management by promoting norms that support such alternative packages [one of the present norms of Govt of India in cashew cultivation, is that 30% of project costs are to be spent on crop protection which usually means money set aside for pesticides whether it is needed or not! This was changed slightly only last year after the Endosulfan scandal].

The group decided that draft “one-year working plans” would be prepared by the following individuals, on specific themes, by the 9th of August.

No Focus Area

- 1 Pesticides and impact on Children
- 2 Industry-government links-exposés
- 3 Status Reports and Hotspots map
- 4 Alternatives and Networking
and extension agencies]
- 5 Broadbasing: consumers/wildlifera
- 6 Rights’ perspectives

In The Spot

- Ananth, Sukanya and VT Padmanabhan
 Madhu, Ananth
 Usha and Rajesh
 Vasu, Kannan and Asha [incl. research
 Manu
 Sunil and Vanaraj

- | | | |
|---|----------------------------------|-------------------|
| 7 | Policies and Legislations | Jayan and Kavitha |
| 8 | Suicides; Health Impact on women | Sukanya and Usha |
| 9 | Exposure studies | Narasimha Reddy |
10. Narasimha Reddy offered help to all the others in the preparation of their working plans.

The format for the working plan would be:

- a. Objective(s)
- b. Rationale
- c. Activities [including methodologies and mechanisms]
- d. Targets and audiences
- e. Communication strategies
- f. Schedule [time frames, responsibilities and roles]
- g. Resources [human, financial, literature]

A smaller group will be meeting on the 13th and 14th of September in Bangalore to discuss the action plans in detail, and for building their own capacities on the subject . The responsibility of booking the place [ISI] lies with Divya for these dates.

For the larger pesticides meeting, the dates would be sought to be finalised for the end of November [Jayan and Usha] and in a location that would enable a visit to the endosulfan-impacted area.

3.2 MINING AND HEALTH

Objectives and Strategies:

- Assist NGOs on health issues, while focusing on preservation of the environment.
- Stress the importance of health issues and using this as an entry point to convey the urgency of the situation.
- Make the government and other agencies understand the message the community is trying to convey.
- Use health surveys as tools to establish liability on corporations and governments.
 - Conduct health surveys to:
 1. Focus on the cause and effect of mine-related diseases and problems-
 2. Be able to show substantial evidence to throw light on the linkage between mines and mine-related diseases and problems.
 3. Provide solutions to these problems.
 4. Implement these solutions.

These are essentially the concerns of the community

- Highlight the problems of unorganised mines:
 1. Abundance of casual labourers:
 - Leads to low salaries, which in turn has a ripple effect on the health of the miners and their families.
 2. Absence of benefits otherwise conferred on miners in the organised sector, such as:

- Identity Cards that allow miners to be treated in Health Clinics
- Retirement benefits.
- Ration Cards.

• Highlight the problems faced by miners in general.

- Solicit the Government's involvement in checking the problems of mines by providing:
 - Ways and means in which to bring about social and health security.
 - Employees State Insurance for the miners just as provided to the factory workers.
 - Control measures to avoid further damage caused by mines.

Lay Epidemiology

○ Steps for a study:

- Framing a research question-

Eg; Does mining of mica lead to respiratory diseases in women/children?

- Selection of:

a) study area- getting a census data ie; number of males/females/children and including important features like industries, mines, etc.

b) study group- deciding whom to include and exclude.

- Selection of a Control Group

This group should be similar to the study group in terms of age/sex/socio-economic status but should bring out a comparison with regard to the 'risk factor' in both groups.-

> Determining the size of these groups-

This could include clusters of all the people or a sample of these clusters.

- Study design:-

These are some of the tools to conduct a study-

i. Interview-a) questionnaire based b) open ended

ii. Focus group discussion.

iii. Participant observation.

iv. Long-term diary (ethnography)- maintaining a diary which records the events right from the start of the study.

v. Surveys-

a) Must have the object of putting forth the problem and must be used as an instrument to find solutions.

b) Questions should be simple and must procure distinct ideas, which are self-explanatory

Process:

The participants of the discussion on Mining and health, were from the prevalent mining areas of India. The Group consisted of representatives of NGOs from Orissa, Jharkhand, Andhra Pradesh, Assam and Nagpur. It was decided after the introductions that experiences from various regions would be shared and then the focus of the discussion would be the problems faced by the miners. Solutions could then be laid out towards the betterment of community health. The focal point of the

meeting gradually centered on the viable steps that could be taken in formulating surveys, reports and various campaign strategies. The unanimous decision of these representatives was that a yearlong campaign consisting of designing tools for Community Health Assessment, building up of the community's awareness, formulating local level campaign strategy, alliance building and finally compiling of national level community health assessment manuals would be undertaken.

Campaigns:

The reasons for campaigns not working were felt to be primarily due to:

- Lack of planning.
- Lack of common vision and agenda.
- Insufficient use of good campaign strategy.
- Lack of technical information.
- Lack of human, technical and financial resources.
- No suitable medium for information dissemination.
- Lack of know-how to evolve and bring in publicity and media coverage.
- Lack of alliance between campaigns and technical resources.
- Non-involvement of the people.
- Insufficient lobbying and advocacy taken up.

The Group came up with a one-year campaign strategy:

- Designing tools and training persons for Community health assessment like questionnaires and surveys.
- Community health assessment and simultaneously creating awareness within the community.
- Empowering the community to harness this awareness so as to facilitate the community in using available skills within itself at the local level.
- Delivery of Campaign strategy :
 - Preparing publicity material in the local language.
 - Building of alliances between the expertise of the mainstream and that of the local level.
 - Updating of old material.
 - Capacity building of the community to exercise their Health rights.

Compilation of national level community health assessment at the end of 12 months (by CHESS III):

- A manual for lay persons on the effects of different minerals on the community's health will be prepared by Dr. SK Dave of NIMH (National Institute for Miner's Health within a period of three months
- A manual for lay persons on health rights especially relating to mining and law will be prepared by Mahalakshmi Parthasarathy and Thangamma Monnappa. This will be completed within a period of six months.

3.3 INDUSTRIAL POLLUTION AND OCCUPATIONAL HEALTH

Objectives:

- ◆ Identifying major health problems with respect to
 - The causes
 - Who is affected
 - Where is the problem more prevalent
 - In terms of numbers
- ◆ How can the problem be eliminated from an Industrial, Legal and Health perspective
- ◆ Developing a standardized lay epidemiological study to build a *prima facie* case.

Process

Dr. Abhay Shukla, CEHAT, facilitated the initial sessions regarding the basic objectives and developing a lay epidemiological study. The first session was a tutorial module in the sense, Dr. Shukla spent some time in getting all the participants acquainted with the basics in terms of occupational health especially with relevance to developing study.

The last session was spent strategising to make our work more effective.

This involved :-

- Mobilising Communities – mainstreaming issues like mining in cities to raise general public opinion and awareness. Primarily targeting unaffected people and possibly attacking day-to-day consumer products to take the cause home.
- Proving higher rates of health disorders and highlighting them. Assimilation of health records of employees of the industry before production which would then be compared with post production health statistics.
- Environmental monitoring – In India the documentation of the Environment and wildlife is more comprehensive than maintenance of human health records. As mortality of crocodiles, fish, basically aquatic animals is high in and around the NALCO's ash pond. The group proposed that they conduct a detailed ecological study in this area to establish a linkage between toxic pollutants and then environment.
- Develop a network of health professionals – Build a network of health care professionals related to occupational health hazards. This would be a definite step towards building a database of health statistics all over India which would strengthen our cause in linking the damages to corrupt industries, negligent governments and indifferent bureaucrats.
- Building a network of legal professionals – This would strengthen legal activism in campaigns.
- Policy changes – Sourcing out, making contacts with industrialists, bureaucrats primarily towards lobbying at the ministry level.

Lay Epidemiology

In developing a basic Lay Epidemiological study to establish a *prima facie* case, the

following questions need to be addressed and comprehended in detail.

- What are the major health problems?
How many people are affected?
- Who is affected more?
When is the problem more?
Where are people affected more?
- Why are people having these problems?
- How can we eliminate the problem?

There are primarily 3 methods that are used. They are-

- Environmental Study method – It does not directly deal with human health
- Public health study methods – Here the focus is primarily on human health and tests
- Qualitative study methods – This is more to do with the perception of the community.

An ideal lay epidemiological study would involve a combination of all the three methods but for a basic study a combination of methods 2 and 3 would suffice.

In reality, there could be three scenarios where a lay epidemiological study is applied.

- Toxics setting – a case where information is available on the occurrence of a specific setting, however no information on the agent.
- Mixture of several agents – for example a cocktail of toxic pesticides
- A single agent – for example lead or mercury

Kinds of documentation of linkage between environmental hazards and health

- Increased occurrence of health problems in certain settings. This is when there are manifestations of one or more health problems in response to a specific agent/ context.
- Association of specific exposures with certain health problems establishing an association does not necessarily indicate causation but can lead towards that.
- Proving causation of a specific disease by a specific agent. This would require scientific expertise.

An ideal community health survey would entail :

- Rapid overview
 - identification of problems: the kind of health problems specific to the area
 - Any causal hypothesis: A serious attempt must be made to make it as specific and explicit as possible.
- Designing the survey: The questionnaire/ observations are a key part to this process. Provisions for comparison between exposed and non- exposed is preferred.
- Carrying out the survey: The respondent sample space should cover all the segments (for

example age, sex...)

➤ Analysis:

- Calculating rates: as an example out of a sample space of 100 how many currently have the problem, had the problem, might have the problem and then the rate is calculated based on the processed information.

➤ Writing the report

Risk Assessment – coined by the the US Environmental Protection Agency, this forms an integral part of any epidemiological study. It involves 4 steps:

- Identifying the hazard – sourcing out the actual agent responsible
- Documenting the exposure
- Dose response relationship – simply put at a certain level of exposure there is a certain affect.
- Expected health risk

3.4 HOW TO STUDY A STUDY?

The expectations, and objectives, for the group:

- To study a problem at the social, technical and the political level so as to determine it's impacts on a community.
- To look at the possibility of setting up peer review panels with the expertise present in the workshop
- To establish a 'scientific' case from a social issue
- To understand when and how data available from other sources can be generalised and extrapolated to the local context.
- To be able to analyse and re-interpret in a simpler fashion so that communities can make use of the studies.
- To be able to counter the credibility of certain institutions and disprove their data or use their own data against them.
- To assess the credibility of a study, especially based on who has done the study
- To be able to choose issues relevant to academic institutions like the school of social work. To identify how students may be able to contribute to activist groups in this regard.
- To avoid repetitions of studies. A compilation of such studies and validation should be useful

Process:

While these were the expectations from the group, the following emerged out of the discussions of the group, and with Dr Ravi Narayan's inputs, taking the case of the Bhopal studies done by the Medico-Friends Circle as concrete examples. Some of the key discussion points are listed below.

Lay Epidemiology has to attempt to find answers to the following questions: what, who, when, where, how and why.

- analytical studies are best undertaken by/with the help of experts in designing such studies, who are aware of proper sampling methods; “all studies need not be undertaken by the activists themselves or the participants of the workshop”; “don’t try to establish causal relationships yourself”, was an advice by Dr Narayan
- While conducting or evaluating a study one must be conscious that both subject and observer biases don’t creep in by ensuring a required degree of standardization
- peer review, especially through professional and respected journals helps a lot – especially in courts of law
- it would also help to present the report to a committee of people who are credible before making it a public document
- the control group selected for the study has to be very similar to the group being studied
- sometimes, using the same records as the official studies helps, for comparison [the ICMR record numbers used for another study in Bhopal for example]
- it is important to ask the community for solutions rather than proposing impractical or alien solutions
- the recommendations section often gives away the inside story related to intentions, pressures, politics etc., especially if it varies significantly from what is being presented in the Findings section
- it is good to build up a resource network of people to support throughout the designing and implementing the study – if not at an institutional level, at a personal and individual level
- While using results from other studies, the precautionary principle can be sought to be applied: “if it has happened elsewhere, there is no reason why it can’t happen here”
- Literature review on a subject is very important – not just the published data, but unpublished reports and data
- Using multiple sources of information strengthens one’s case
- Check studies for “conflict of interest” – who is it funded by, for instance?
- While trying to transfer data from other studies, or while extrapolating, give weightage to a study which is the closest to your own situation.
- Elements of tracking changes and trends can happen either through studies which have baselines, and are recording changes at appropriate intervals, or by building in questions related to “before” and “after”, ethnographic accounts etc.
- On certain subjects, it is best to find out what the industry knows about it. They usually have information on a particular product, chemical etc., both through their own primary data as well as secondary data.

It was agreed that taking back the results of a study to the community, and de-mystifying the findings in a comprehensible fashion, and centering dialogues around such data is a very important process

Points to remember

A good study should ideally have the following information in its report and from this information, the intentions, the credibility, the scientificity can be gleaned:

1. Introduction and background (does it lay out the reasons as to what prompted the study to be undertaken and who all were involved?)
2. Literature review [is it recent enough?]
3. Objectives [including whether it is a descriptive study or an analytical one, with a hypothesis?]
4. Materials and methods employed
5. Results
6. Discussions [not merely echoing in words what the results have already shown]
7. Limitations [a study that clearly lays out its limitations on the one hand defends itself from criticism on particular grounds, and also invites the readers to understand the extent to which the results would be applicable and valid]

4.1 Common Objectives and Collective Action

One of the common objectives that clearly emerged from various campaign groups was the need to do health surveys to establish a prima face case in the pollution hotspots. There were several individuals and organizations that were keen to see this through. They were:

- 1) Upendra Hosbet and Gururaj Budhya—Industrial Pollution (Mangalore)
- 2) Mohan (School of Social Work- *Roshni Nilaya*, Mangalore) Industrial Polln/Mining
- 3) Sisir Tripathi/ Bhakto Mohanty (Orissa)—Mining
- 4) Rajendra Kumar (Yelleswaram, Andhra Pradesh) Stone Crushing
- 5) Damodar (Warangal, Andhra Pradesh) Pesticide poisoning.
- 6) Gangi Reddy (Nellore, AP) Mica Mining
- 7) Praveer Peter (Pakore,) Stone Quarries
- 8) Gemma Mendez (Jharkhand) Coal Mining
- 9) Ashalatha (Hyderabad) Pesticide poisoning
- 10) Ajitha Susan George (Jadugoda) Uranium Mining/Dumping
- 11) Purushan (Eloor) Industrial Pollution
- 12) Srinivasan (Vellore) Tanneries
- 13) Narasimha Reddy (Pattancheru) Industrial Pollution
- 14) Dayananda Gowda (Doddabalapur) Industrial Pollution
- 15) Nizam (Cuddalore, Tamil Nadu) Industrial Pollution

The group agreed to perform a series of these health surveys depending on the where the need is most acute and where the resources are available.

4.2 Statement of Collective Concern:

The Statement was drafted initially by a small group of volunteers comprising Adv. T Mohan, Gemma Mendez, P. Mahalakshmi, Narasimha Reddy, Ananthapadmanabhan and Manu Gopalan. It was later refined, edited and adopted by the general body.

COMMON STATEMENT OF COLLECTIVE CONCERN

WE ARE A GROUP OF COMMUNITY REPRESENTATIVES AND PEOPLE WORKING WITH COMMUNITIES AFFECTED BY PESTICIDES, MINING, RADIATION, QUARRYING, INDUSTRIAL POLLUTION AND WASTE DUMPING, CONCERNED CITIZENS, VOLUNTARY ORGANISATIONS, HUMAN RIGHTS GROUPS, , NETWORKS OF CAMPAIGN GROUPS, HEALTH CARE PROFESSIONALS AND SOCIAL SCIENTISTS NUMBERING 110 FROM ALL OVER THE COUNTRY WHO AT VISTAR, **BANGALORE BETWEEN THE 26TH AND THE 28TH OF JULY 2002.**

AND, THIS MEETING HAVING DELIBERATED UPON INDUSTRIAL, AGRICULTURAL, MINING AND WASTE DISPOSAL PRACTICES, AND THE HEALTH AND RELATED SOCIAL IMPACTS OF SUCH PRACTICES ON COMMUNITIES, WORKFORCE AND THE ENVIRONMENT

AND RECOGNISING THAT COMMUNITIES IN INDIA ARE UNJUSTLY EXPOSED TO THESE TOXIC SUBSTANCES AND UNSAFE, UNSUSTAINABLE AND DESTRUCTIVE PRACTICES

AND ARE CONCERNED THAT POOR AND MARGINALISED SECTIONS OF SOCIETY (TRIBALS, WOMEN, DALITS) ARE DISPROPORTIONATELY BEARING THE BRUNT OF SUCH TOXIC SUBSTANCES AND PRACTICES

AND RECOGNISING THAT SUCH UNSAFE, UNSUSTAINABLE AND DESTRUCTIVE PRACTICES CONSTITUTES A GROSS VIOLATION OF HUMAN RIGHTS

AND RECOGNISING THAT LOCAL, NATIONAL AND INTERNATIONAL REGULATORY BODIES, GOVERNANCE STRUCTURES, FINANCIAL, SCIENTIFIC & RESEARCH INSTITUTIONS AND THE HEALTH CARE PROFESSION HAVE FAILED IN THEIR DUTY TO ANTICIPATE, PREVENT AND REMEDIATE HARM ARISING FROM THE USE OF SUCH SUBSTANCES AND PRACTICES.

AND THE MEETING HAS NOTED THAT NONE OF THE POLLUTERS HAVE BEEN BROUGHT TO BOOK, NOR HAS THERE BEEN ANY EFFORT TO PUNISH THE GUILTY.

AND THE LEGISLATURE, JUDICIARY AND EXECUTIVE IN OUR DEMOCRATIC FRAMEWORK HAVE FAILED TO PROTECT THE RIGHT TO LIFE ENSHRINED IN THE CONSITUTION OF INDIA

AND RECOGNISING THE FACT THAT SUCH SUBSTANCES AND PRACTICES HAVE ALSO SERIOUSLY ENDANGERED WATER BODIES, LIVESTOCK AND DIVERSITY OF LIFE AND LIFEFORMS.

AND RECOGNISING THAT RAPID DEPLETION OF NATURAL RESOURCES AND DEG

RADATION OF ENVIRONMENT HAS AFFECTED THE HEALTH AND LIVELIHOODS OF PEOPLE AND THREATENS THE FUTURE OF CHILDREN, AND THE VERY RIGHT TO LIFE OF FUTURE GENERATIONS.

AND RECOGNISING THAT TOXIC CHEMICALS HAVE A PARTICULARLY DELETERIOUS AND IRREVERSIBLE EFFECT ON FOETUS, CHILDREN AND THE FUTURE

AND RECOGNISING THAT LARGE SCALE DISPLACEMENT OF PEOPLE ESPECIALLY TRIBALS AND DALITS BY MANY FORMS OF DEVELOPMENT PROJECTS (LARGE DAMS, MINING AND OTHER PROJECTS) HAS NEGATIVE EFFECTS ON HEALTH AND THREATENS THEIR VERY SURVIVAL

AND SUCH DEGRADATION AND DEPLETION HAS BEEN ACCELERATED BY GLOBALISATION, LIBERALISATION AND PRIVATISATION MARKED BY RECKLESS PURSUIT OF PROFIT BY CORPORATES (WHETHER INDIAN OR TRANS NATIONAL, PRIVATE OR PUBLIC SECTOR) SUPPORTED BY WORLD TRADE ORGANISATION, WORLD BANK AND OTHER MULTILATERAL LENDING AGENCIES.

AND RECOGNISING THAT GENETICALLY MODIFIED CROPS POSE A SERIOUS THREAT TO HUMAN AND ECOLOGICAL HEALTH.

AND, THIS MEETING DEMANDS THAT:

EFFECTIVE, APPROPRIATE AND IMMEDIATE STEPS ARE TAKEN TO END UNSAFE, UNSUSTAINABLE AND ECOLOGICALLY-DESTRUCTIVE PRACTICES AND TO BAN , SUBSTANCES WHICH ARE HAZARDOUS TO ANY FORMS OF LIFE.

GOVERNMENT CEASES TO SUPPORT AND SUBSIDISE THE MANUFACTURE AND USE OF TOXIC SUBSTANCES AND UNSAFE PRACTICES AND INSTEAD PROMOTE, SUPPORT SUBSIDISE COMMUNITY DRIVEN, SAFE ALTERNATIVES AND BEST ENVIRONMENT PRACTICES

LIABILITY & COMPENSATION

HEALTH & MONITORING

GOVERNMENT ENSURES FULL AND PUBLIC DISCLOSURE OF INFORMATION, STUDIES AND DOCUMENTATION ON ALL SUCH TOXIC SUBSTANCES AND PRACTICES.

GOVERNMENT IMPLEMENT THE "PEOPLE'S CHARTER FOR HEALTH", BROUGHT OUT BY THE *PEOPLE'S HEALTH ASSEMBLY* IN 2001.

RESEARCH INSTITUTIONS AND HEALTH PROFESSIONALS DISCHARGE THEIR RESPONSIBILITY TO STUDY, MONITOR AND INFORM COMMUNITIES AND DECISIONMAKERS OF THE HEALTH IMPACTS OF HAZARDOUS SUBSTANCES AND PRACTICES ON THE PEOPLE AND ENVIRONMENT.

THE PRECAUTIONARY PRINCIPLE FORMS THE BASIS OF ALL POLICY AND MAKING MAKING.

THE ONUS OF PROVING ENVIRONMENTAL SAFETY OF ALL SUBSTANCES AND PRACTICES LIES WITH THE POLLUTER.

ALL DECISION-MAKING SHOULD BE PARTICIPATORY, CONSULTATIVE AND TRANSPARENT
ALL DEVELOPMENT SHOULD BE SUSTAINABLE

4.3 Strengths and Weaknesses of CHESS-2

- v Deepika felt this was a great idea. It would be necessary to get more groups from the northern and the western. The food and the location were excellent.
- v Dr. Dave felt inspired after the three-day skillshare.
- v Bharathi urged all the participants to stay in touch.
- v Naveen felt fortunate to be here, however he felt that the exposure was not enough. It was a good opportunity for students and young people.
- v Kavitha was grateful to the organisers and was happy about the plans of the Pesticide group.
- v Upendra acknowledged Bidhan for insisting that he should interact with more people. Meeting all these people has given him the confidence to fight the government and the corporations.
- v Ananth felt that more time was needed for smaller meetings.
- v Nity felt that the arrangements were well taken care of. While the structure was tight, it also provided room for flexibility. He suggested that in order to have more time, the next meeting might be extended to four days.
- v Ajita felt the time was too short. The space and the food was very good.
- v Nimmi extended her thanks on behalf of the whole group to the staff at Vistar- Sampath, Prathiba, David and the Kitchen staff.
- v Gemma said that she only came because Bidhan pushed her to come. She enjoyed the three days. She would like the workshop to be in a more central city next time keeping in mind those coming from the north.
- v Gururaj felt that this was a good effort. He would be interested to concretize plans further on health related work. He would like to see a clear plan of action, as it did not happen in CHESS I. A report on the outcome of CHESS II and the follow up should be included in CHESS III.
- v Jayan was happy that things were moving forward. People felt that they needed more time, which implies that the meeting was good. The effort of Bidhan and Manu was inspiring. Meeting people from different parts of the country gives us hope. We should have more regional and subject oriented meetings between CHESS II and CHESS III. A page from each of the participants on the accomplishments would be a good idea for next years meeting. He looks forward to next years meeting
- v Praveer Peter felt good in the meeting and felt that everyone must keep in touch. He made lots of friends and met community health people. It has thus been a great opportunity.
- v Sheetal came into this meeting entirely by chance. It has been a really nice learning experience for her. She felt that she must liaison, get students involved in the movement. She enjoyed the rustic retreat.
- v Vittal Rao really enjoyed the meeting and the memories would stay with him for a long time.
- v Narasimha appreciated this effort. He felt that the "organizing style: needed to improve. Other than scientific methods, other methodologies and strategies should have been looked into. Community health is an effective plan for the group to act on.
- v Asha wanted to thank Mahalakshmi. She felt that everyone learnt a lot from each other.

-
- She felt bad about missing out on the other small group discussions.
- v Sitaram from Doddaballapur spoke about the crop failures and the contaminated water in the tube wells in his home. Nothing had been done so far. This meeting has inspired him to act on these issues.
 - v Bidhan thanked all the groups who took care of him while he was travelling. There were many contacts that were built on the way. The real experiences excited him. Gemma was a difficult person to convince. He was happy to note the diversity of the group. He wanted to take all the energy to CHESS III.
 - v Sanju mentioned a funny incident at the railway station, I am sure you all can recollect!
 - v Manu said that he was happy to have made many more friends and suggested everyone sing one last song together.

CHESS-2 unlike many meetings of similar scale and proportion, had a clear cultural agenda. The hypothesis was clearly spelt out that for any social change to actually happen people must come together and gather strength from the freshness of the community that is born. And there is no better way to nurture community than singing and dancing.

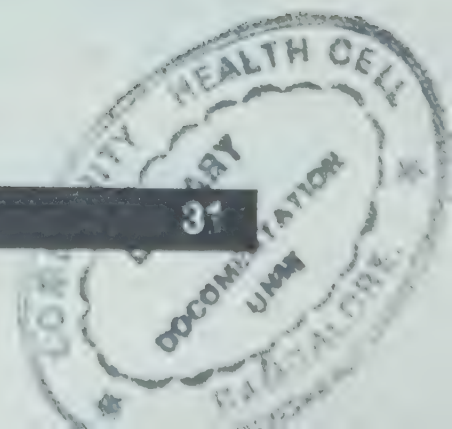
Therefore every session of CHESS-2 began with a song and some ended with a dance!

The mornings were welcomed by morning ragas under the tamarind tree which slowly transgressed into folk music.

The evenings were interspersed with participating in art installation work as well as more singing and dancing in the 'well' on campus, which was colourfully lit for the occasion.

The cultural agenda was topped by a play on the Apartheid by a Bangalorean Theatre group-Rafiki and a Folk/Jazz/Rock concert by Chronic Blues Band and the participants of CHESS-2.

The final cultural activity was deliberately sited in Richmond Park, a busy park in Bangalore city as it was felt necessary to break the "deliberating within the transformed club" phenomenon and reach out to the other people around.



E-100
P02

ANNEXURES :

Andhra pradesh :

1. Mr. N. Kishore

CRY – net
Kiolampudi colony
Behind Eenadu
Seetamdhar, Visakhapatnam
0891-732572

2. Mr. K. Rajendra kumar

Sujana,
Yeleswaram ,
East godavari, A.P.– 533429
#08868-24623

Assam :

3. Dr. Sunil Kaul

He is a public health activist working in the northeast with “the ant.” He has trained in Medicine and Public health, he trains village level health workers and pharmacists and has worked for a long time on Malaria, TB, and on the rational use of drugs.

E-mail: scowl@satyam.net.in

“the ant” is a young organisation based in Bongaigaon in Assam. It works directly on sustainable livelihoods, health and women's empowerment besides acting as a resource and support group for other N.G.Os and activists all over the northeast.

“the ant”

Ward 10, B.O.C. Gate,
Bongaigaon (N), Assam- 783 380
Ph: 03664 25506
E-mail: theant1@rediffmail.com

Bangalore :

4. Mr. Benson Issac

Samvada, Ram's Infantry Manor,
No. 70, Infantry Road, Bangalore – 1,
080-5587493
Email: samvada@vsnl.net

5. Mr. Gururaja Budhya (TIDE)

Having worked with different environment groups and movements, his strength lies in bringing people together from diverse background. Also a member of environment journalist group in Karnataka. A strong networker in Karnataka.

TIDE 19, 9th cross, 6th Main, Malleswaram, Bangalore-560003

Email: budhyag@hotmail.com, tide@vsnl.com

Mobile: 0-9844069634(M) Phone: 080-3315656/3462032 (o), 080-3364509 ®

6. Mr. G.S.R. Prasad

10/B Nanjappa Road

Shantai Nagar

Bangalore-27

080-2221324, 9844183410

7. Ms. Mahalakshmi Parthasarathy

Mahalakshmi is working with mining struggle groups. She is also involved with legal and media advocacy and information documentation.

FAIR 164, 3rd Main ,

Ganganagar, Bangalore.

080-3633171

Email: pmahalakshmi@yahoo.com

8. Mr. P. Srinivas

ICRA, No. 22, 5th Cross, Michael palya, Bangalore-560075, 080-5283370

Email: icra@bgl.vsnl.net.in

9. Mr. M.R.Seetharam

Aradeshahalli, Devanahalli,

Bangalore-562110,

080-8464225, 9845251907S

10. Dr. Rajan Patil

Dr. Rajan is an epidemiologist and is presently a Research/ Training Assistant in CHC with a special interest in vector borne diseases. He has been involved with creating an interactive science teaching module on mosquitoes and their control. 080-5525372/5531518 (o)

Email: rajanpatil@yahoo.com

11. Dr. Ravi Narayan

Dr. Ravi is the Community Health Advisor of CHC with professional interest and training in public health, industrial health and preventive and social medicine. Earlier as an Associate Professor of Community Health at St. John's Medical College he worked on occupational hazards of the tea industry and the health effects of agricultural development.

Email: tnarayan@vsnl.com

12. Dr. Rajkumar. N

Community Health Cell, Bangalore
080-5531518

13. Ms. Thangamma Monnappa :

An active volunteer with GP. Been a law graduate she plans to further work in the area of Environment law.

4A, Lumbini Apartments,
5 Rest House Road, Bangalore – 01
Email: tangma80@yahoo.com
9845224967 (M)

14. Dr. Thelma Narayan is the present coordinator of CHC. She is an epidemiologist with a doctorate in public health policy. She has been involved as a resource person for studies on the Bhopal health disaster and is currently a member of the Karnataka Government Task Force on Health and Family Welfare.

Community health Cell
367, 1st MAIN, 1st Block
Koramangala, Bangalore-560034
080-5531518
Fax: 080-5525372
Email: tnarayan@vsnl.com, sochara@vsnl.com

15. DR. Unnikrishnan P V

OXFAM

Media Strategist and specialist in Disaster Management.

Email: unnikru@vsnl.com

Bhadravati

16. Dr. Narendra Babu

Local resident of bhadravati. Dr. Babu takes time out from his clinic to participate in Save tungabhadra federation's work, a forum fighting against the pollution of River Tungabhadra due to Mysore Paper and Pulp Industry and the mining work around Kudremukh. He was involved in a study related to health impact due to pollution of bhadra river around kudremukh mining area.

Meena Nursing Home, T.K. Road,
Bhadravati, Shimoga, Karnataka-577303
9845226678 (M) ,# 08282-66690 @, # 08282-66665/65505 (O)

Bhopal:

17. Mr. Nishant:

As a community researcher Nishant has worked exhaustively in Bhopal doing a health survey of children born to exposed parents as opposed to unexposed ones to the gas tragedy. His new survey has become an innovative stick to beat the Indian Government with, for the survivors of the disaster.

Sambhavna, 44, Sant kanwar, Ram Nagar, Berasia Road, Bhopal, M.P., # 0755-730914/743157
Email: sambhavna@sanchar.net.in

18. Mr. V.T.Padmanabhan

Sambhavana Clinic

Berasia Road, Bhopal

Email: VTPADMA@yahoo.com

Chennai :

19. Mr. T. Mohan (Advocate)

6 III Avenue

Chennai – 600090

044-4903415

Email: devika@xlweb.com, mohan@law.com

20. Mr. Nityanand Jayaraman

Nityanand is an independent journalist working on toxic issues for over 7 years. He is currently working with Corpwatch India.

Address: 218, 6th Main, 6th Cross, Rajarajeshwari Nagar, Bangalore-560 098

Phone: 080-8601033

Email: nity68@vsnl.com, www.corpwatchindia.org

21. Mr. Rajesh Rangarajan

Rajesh has been working on the issue of municipal waste in the city of Chennai as part of Toxics Link.

8, 4th Street, Venkateshwara nagar

Adayar, Chennai-600020,

044-4460387/4914358

Email: tlchennai@vsnl.net

22. Dr. Ramakrishna R.

He has a Ph.D. in Biostatistics and is carrying out a Master's program in Applied Epidemiology at the Australian National University, Canberra. He focuses on research, training and consultancy in the fields of leprosy, nutrition and health services.

Assistant Director,

National Institute of Epidemiology (Indian Council of Medical Research),

Mayor Ramanathan Road,

Chetput, Chennai- 600 031.

Cuddalore:

23. Dr. Kannan, M.B.B.S.

He is a District Organiser working with Pasumai Thaayagam.

Pasumai Thaayagam (Green Motherland),

VMS- Church 1 Sp. Koval street,

Chidambaram, Cuddalore District.

Ph: 04144-21281 /

(off) 044-8172122/0 / 8172120 / 8231617

24. Mr. C. Srinivasan

He is a volunteer for Pasumai Thaayagam. An N.G.O. based in Chennai. It is actively involved creating public awareness and actions to prevent environmental degradation by tanneries and chemical industries.

45, New Street, Kilvisharam

Mevisharam Post- 632 509.

(Res.) 04172-68270

(Off) 04172-66804

(Mobile) 09842368270

E-mail: pasumaithaayagam@yahoo.com

Delhi :

25. Mr. Ananthapadmanabhan

Ananth is the Executive Director of Greenpeace India. He had been teaching school-children for more than a decade. He also spent a few years in the Environment Division of a leading financial institution.

Email: ananth@dialb.greenpeace.org

26. Mr. Bharati Chaturvedi

Director, Chintan Environmental Research Group

Chintan is an NGO that works on issues related to waste and toxics. They work with communities both recyclers and wastepickers, as well as consumers in order to build up an understanding and energy towards more sustainable consumption patterns. They also work towards a shift in policy through public understanding, research and advocacy on these issues.

238 Sidhartha Enclave,

New Delhi-110014, # 011-4314478/3381627

27. Mr. Bidhan Chandra Singh

Bidhan is a trainee campaigner with Greenpeace India.

Email: deogharbiddu@hotmail.com

28. Ms. Divya Raghunandan

Divya is a trainee campaigner with Greenpeace India.

080-3536152

Email: r_divya@hotmail.com

29. Ms. Madhumita Dutta

Toxics Link Delhi,, H 2 Jungpura Ext., New Delhi-14, # 011-4320711/4326006
mdutta@vsnl.com

30. Mr. Manu Gopalan

Manu is a toxics campaigner with Greenpeace India.

Email: manu.gopalan@dialb.greenpeace.org

31. Ms. Nirmala Karunan

Nirmala is the Administration Manager of Greenpeace in India.

J-15, Saket, New Delhi-17

011-6536717/6962932, Fax: 011-6536716 Email: nirmala.karunan@dialb.greenpeace.org

32. Mr. Sanjiv Gopal

Sanjiv is currently a trainee campaigner with Greenpeace India.

Email: sanjiv.gopal@dialb.greenpeace.org

33. Mr. Sanjay Kumar Srivastava

Chintan, 17, Jangpura Market 2nd floor, New Delhi – 110013

011- 3381627/4314478

Email: bharatich@hotmail.com

Dodbalapur :

34. Mr. Dayanand Gowda

He is a final year LL.B student from Vidyodaya Law College in Tumkur. He volunteers with a local youth group called Janadwani Yuva Vedike, which is situated in Doddaballapur, Bangalore rural area. This N.G.O. is a social welfare organisation and has organised programmes for students regarding water problems and publishes monthly magazines called Yuvadwani.

Janadwani Yuva Vedika, Opp. Masjid Kumbarpet

Dodbalapur

080-7626450 ®

35. Ms. Sandhya

Land owner, having 100 acres of land around the area of dodballapur. Most of the land , water source has been contaminated by Gogo factory.

Village : Aradeshhalli, Dodbalapur

Near bangalore, Karnataka

Edayar :

36. Mr. C.N.Beeran

Chenambillil House, Edayar

P.O: Binanipuram – 683502

Alwaye, Kerala

37. Mr. Salim.V.A

Fighting pollution due to Binani Zinc's Jarosite Pond in Edayar, Kerala

Valiangadi, Binanipuram(PO),

Edayar, Ernakulam-6835021

0484-555592

38. Mr. T.M.Sainudeen

Photographer
Thittangil house
Edayar-683502
0484-540845 ®

Eloor :

39. Mr. Ashkar K.K.

Kanavan House
Eloor North,
P.O: Udyogmandal, Kerala-683501
0484-545157

40. Mr. V. J. Jose

Jose was working in Cochin spreading awareness about Road safety and First-Aid tips with Ernakulam Rural Action Force. Now he is an active volunteer of Greenpeace-India. Involved in mobilizing the local community using education material and films from the Greenpeace library. He has also been instrumental in environmental monitoring of the river Periyar.

1/11 'REMYA'
Vadassery (H)Eloor South,
P.O : Udyogmandal, Kerela-683501
0484-545314

41. Mr. V V Purushan

Purushan is the community leader of Periyar Malineekarana Virudha Samithi, a community based organization involved in pollution prevention through direct actions in Eloor, the largest industrial estate in Kerala.

Periyar Malineekarana Virudha Samathi
Sankhyapury, Eloor North,
Udyogmandal – 683501
Keralam
546663

42. Ms. Remya

A college student extremely keen to work on health issues in Eloor

1/11 'REMYA'
Vadassery (H), Eloor South,
P.O: Udyagamandal, Kerala-683501
0484-545314

43. Mr. M.M.Sakeer Husain

A long time activist with the Periyar Malineekarana Virudha Samiti, Sakeer has been instrumental in putting together the key actions of the group in Eloor.

P.M.V.S

Janajagratha, Eloor Depot

Udyogmandal - 683501

Gudur :**44. Mr. Gangi Reddy V**

Rural reconstruction and development society

The organization is fighting for the rights of dalits/adivasis. The struggle is also against illegal mining and pollution due to mica mining. RRDS went to the court against a industrialist, who took lease of tribal village and tried evacuate it. Rural reconstruction and development society

Sydapuram 524407Nellore Dist. (A.P)# 08621-87096

Fax: 08624-52110

Email: rlds_organisation@email.com

Gujarat :**45. Mr. Michael Mazgaonkar**

Besides being a long-time activist with the *Paryavaran Suraksha Samiti*, he has been working on a wide variety of environmental and other social problems in Gujarat.

PSS, Juna Mozda,

Dediapada-393040, Gujarat

02640-20629

Email:pss@narmada.net.in

46. Ms. Swati Desai

Swati desai's work involves trying to mobilize affected communities along a 200km stretch from Vapi to Mehsana in Gujarat on issues of ground and surface water contamination, hazardous solid waste, air pollution, health effects and TNCs.

PSS Juna Mozda,

Dedaipada,

Dist: Narmada-393040

Gujarat

02440-20629

pss@narmada.net.in

Harihar Polyfibres :**47. Mr. S.R. Hiremath**

Samaj Parivartana samudaya

SPS is a voluntary organization working on the issue of environment with presence in Karnataka, MP and Orissa.SPS and reputed national institutes have conducted studies on pollution of

Tungabhadra river due to release of effluents of Harihar PF. Facilitated the formation of Tungabhadra parisar Samiti, a local group of 20 villages; actively encouraged fisherwoman/man to file cases, against HPF; filed PIL in the High Court, which resulted in a order asking HPF to take corrective measures to control pollution.

SPS Ashadeep, Jayanagar Cross

Saptapur, Dharwad-580001, Karnataka

0836-861890. Tele Fax: 860131

sr_hiremath@hotmail.com, sr_hiremath@rediffmail.com

48. Shehnaz Faujdar

Samaj Parivartan Samudaya, Ranibennur

08373-861890

Hazaribagh:

49. Gemma Mendes

She works as a community health nurse in villages where there is no doctor. They have three health centres around which they form women group and empower them through self help groups. Their motto is "health in Peoples hand". They are also involved in the villages affected by coal mining, large scale displacement without adequate rehabilitation.

Chotanagpur Adivasi Sewa Samiti

P.O: Charhi, Hazaribagh-825336

Jharkhand.

Ph: 06546-32476/ 31128

Hyderabad :

50. Ashalatha

Anthra is an NGO started by women veterinarians and works primarily with poor farmers, dalits, adivasis, particularly women. It works to strengthen people's livelihoods by improving the health & production of livestock and poultry in the wider context of natural resource management and sustainable development.

Anthra works in AP & Maharashtra and in AP the major work areas are the districts of East Godavari, Visakhapatnam and Medak and also several other districts. Dr.Sagari Ramdas is the Director of Anthra in Andhra Pradesh.

Major Components of work:

- Action research on indigenous knowledge of rural communities on livestock rearing
- Participatory planning, Evaluation, and monitoring for development interventions
- Training of village level animal health workers
- Policy advocacy
- Publication of educational materials

Anthara

124, Vayupuri

Secunderabad-94

040-7113167 / 7110977 (O) / 7225419 (R)

Email: anthra@hd2.vsnl.net.in, yaksi@satyam.net

51. Dr. A . Kishan Rao

President , Patancheru Anti Pollution Committee

He was formerly a lecturer and also a medical and health officer. He is a resident of Patancheru and has observed the ill-effects of pollution very closely. He says, now I can see the effects of pollution on my family members. Author of book called "A hell on earth ", and was also involved in a health survey around the area. Medical environmentalist and activist Dr.Rao has been taking up the cause of the victim of pollution at patancheru for more than a decade to different fora's.

Yashodhara hospital, 12-5, Srinagar colony,
Patancheru - 502319, Medak Dist. (A.P.)

08455-42406(O)

08455-27739®

52. Ms. Kavitha Kuruganti

302, Dutta Mansion, Mehdipatnam, Hyderabad

Email: kavitha_kuruganti@yahoo.com

53. Mr. D.Narasimha Reddy

Executive director, Centre for Resource Education

A voluntary organization based in Hyderabad working on issues related to agriculture, sustainable development, environment protection and other related rural and urban issues.

Narasimha reddy is a person committed to struggle on the issue of pollution due to industries around Hyderabad . Passion to bring people and organization together with strong networking capacity.

CSR

201, Maheshwari Complex

Masab Tank, Hyderabad

044-6613367

email: creind@hd2.dot.net.in

54. Mr. Satheesh

Anthara

124, Vayupuri, Secunderabad-94

040-7113167/7110977

Email: anthra@hd2.vsnl.net.in

Jharkhand :

55. Ms. Ajitha Susan George:

She has been instrumental in performing a health survey focusing on women's health in Jadugoda. In Naomundi she is working on indigenous systems of medicine.

Omon Mahila Sangathan,

Village Duccasai, P.O: Naumundi

Singhbhum West, Jharkhand-833217

06596-33501# 06596-33389

Email: jsr_ajithasg@sancharnet.in

56. Mr. Praveer Peter

He has been working for the last seven years in Jharkhand and works on understanding land / forest / mining rights issues of tribals and women. He is presently representing MMP-North. He is working in stone quarry areas where most of the workers work only for 4-5 months a year. The workers are tribals doing agriculture during the rest of the time.

Abhivyakti

Near Deepti Mission, Sakrugarh,

Sahebganj – 816109, Jharkhand

06436-24227

Email: praveerpeter@rediffmail.com

Kerala

57. Mr. M.S.Sunny

Maikkatti House,

Piruvam Momeed-686726

Kerala

0485-246626

58. Mr. B.S.Vanarajan

Manitham Trust

248-F, Sastha nagar

Sivagangai Main Road

Manamadurai-630606

Sivagangai District.

59. Mr. C.Srinivasan

Pasumai Thayagam

45, New Street

Kilvisharam

Melvisharam

04172-68270 ®

04172-66804 (O)

9842368270 (M)

Kodaikanal :

60. Mr. K.Gopalakrishnan

Ponds Hindustan Lever Ex-Mercury Employees Union

C/O Beema Vidios, Anna Salai, Kodaikanal-624101//#04542-42417/41636

Email: kodaikgk@yahoo.com

61. Mr. R.Kanan

Palani Hills Conservation Council, P.Box No. 32, Kodaikanal.

Email: kanan@vsnl.com

62. Mr. Navroz Mody

Toxics Campaigner of Greenpeace fighting Mercury Pollution in Kodaikanal and PVC in Cudallore and Mettur.

Email: navroz.mody@dialb.greenpeace.org

63. Ms. Meena Subramaniam

She resides in Kodaikanal and works with PHCC and Greenpeace programmes and campaigns. Currently she is trying to get a concrete garbage treatment project together, using concepts like zero waste and micro level composting.

The municipality does not address the problem of mixed wet waste and the health of several children who live within the precincts is under severe threat. Industrial tourism is a serious issue and the pollution emanating from garbage is threatening wildlife, the fragile Eco-system of the Palnis.

Nethajeevam,

Upper Lake Road,

Kodaikanal- 624 101.

Ph: 04542 40932

E-mail: kodaifern@yahoo.co.in

Mangalore :

64. Ms. Kavitha. M. R

MSW Student

School of Social Work

Roshini Nilaya

Mangalore

65. Professor Mohan.A.K

Roshini Nilaya School of Social Work

Mangalore-575002

0825-435791

Email: sswroshni@vasnet.co.in

He teaches Social Work at Roshni Nilaya School of Social work, Mangalore.

66. Mr. Naveen A.D.

He is a student in Personnel Management (II M.S.W.). He has attended a National Integration Camp, an International youth Camp and state and university level Camps and has taken part in an AIDS campaign. He has also been to Gujarat and done rehabilitation work. He has worked as a Habitual Photographic Journalist for Times of India and has a collection of photographs related to many social issues.

II M.S.W Student

School of Social Work,

Roshni Nilaya,
Mangalore, Karnataka.
Email: bulleyedsouza@rediffmail.com

67. Ms. Shwetha Rasquinha

II MSW student
School of Social Work
Roshini Nilaya
Mangalore

68. Mr. Upendra Hosbet

Runs a computer institute, actively working on the issue of environment since a decade. He says that they are against any Mega projects. Has organised protests against Cogentrix.

D.K.Parisara Saktha Okkota

St. Joseph's Compound

Bendoor Well, Mangalore

478499/478488

upendra_hosbet@hotmail.com, upendra_hosbet@yahoo.com

69. Mr. E. Vittal Rao

Organic Farmer / President

D.K.Parisara Saktha Okkuta

P.O: Kinya-574156

D.K, Mangalore

Mumbai :

70. Ms. Deepika D'souza,

Coordinator, Human rights law network.

84, CVOD,

Jain School, Dongri

Mumbai-9

022-3716690/3756957

Email: huright@vsnl.com, hmumbai@vsnl.com

71. Dr. Deepa Shastry

L.T.Municipal Medical College

Sion, Mumbai

Res : F/15, Shri Kumar Society

Pandit Nehru Road, Vakota

Santa Cruz (E), Mumbai-55

022-6103904/6131109

Email: dgshastry@hotmail.com

72. Ms.Geeta Balakrishnan

She is involved in supervising students in various field settings including Community work, work on garbage, health, education issues, issues associated with workers working in stone quarries. She also works in Children's institutions, rescued commercial sex workers and children with HIV AIDS.

She is the Director of Project ANKUR working with mentally challenged children from 18 municipal schools in Mumbai and she guides students' (M.S.W.) working on their research studies and term papers on numerous topics.

College of Social Work,
Nirmala Niketan, 38 New Marine Lines,
Mumbai- 400 020.
Ph: 022- 2067345/ 2002615

73. Dr.Jagruti Waghela

Lecturer Gen. Surgery
Lokmanya Tilak Hospital,
Mumbai – 22
022-6128276 ®

74. Dr. Murlidhar V

He is a Mumbai based doctor with experience and interest in community health surveys and environmental health issues.

OHSC, 6, Gokuldaspatha Road,
Dadar (E), Mumbai - 14
E mail: murlidharv@vsnl.com

75. Dr. Priya

B/9 New Thane Society
Bhaskar Colony
Naupada, Thane
Maharashtra
022-5436797
Email: priyasatalkar@rediff.com

76. Ms.Saba A. Khan

She is a Lecturer teaching Social work in the field of Health and Health Management in Social Work for the past 13 years. She also provides fieldwork training and supervision for students of Bachelors and Masters placed in Medical and Community Health settings.

Senior Lecturer,
College of Social Work,
Nirmala Niketan,
38 New Marine Lines,
Mumbai- 400 020
022-2002615/2067345 (O)
022-8911310 (R)
Email: adamsaba@bol.net.in

77. Ms. Sheetal Goel

She has been largely involved in the area of HIV /AIDS, counselling, training, Research and establishing community outreach services in HIV in Mumbai.

She is presently a faculty member and supervises students in their professional training as social workers.

Faculty, Department of Medical and Psychiatric Social Work,

Tata Institute of Social Sciences,

P.O. Box 8313,

Deonar, Mumbai- 88

Ph: 022 - 5563290-96

Fax 022 5562912

E-mail: sheetu72@hotmail.com

78. Mr. Sunil Scaria

ICHRL,

84, CVOD, Jain school

Dongri, Mumbai-9

022-3716690/3756957

Email: huright@vsnl.com, hmumbai@vsnl.com

79. Ms. Sweta Narayan

ICHRL

Mumbai

Orissa :

80. Ms. Anjana Mahakud

Involved in issues relating to women's empowerment, displacement due to mining and organising the mining workers to fight for their rights. She is a part of the women and mining network, working as coordinator of Nari Surakya Samiti.

Nari Surakhya Samiti,

At: Gitagram

P.O: Police Training College

Dist: Angul, Orissa

81. Mr. Bhakto Batsal Mohanty

Convenor North Orissa, OMAPAN

Working as a development worker and activist since 15 years in mining area of north orissa in kendujhar district. He is active member of the people's movement in Gandhamardan Iron ore mining area in kendujhar.

C/O SANJOG, Mining road

P.O: Kendujhargarh

Dist: Kendujhar

PIN: 758001

06766-55079

Email: womenorg@rediffmail.com

82. Mr. Kailash nayak
Mayurbhanj, OMAPAN.
At/Post: Dengula
Via: Koira
Dist: Sundargarh, Orissa
PIN: 770048
0661-4735184

83. Mr. Rajesh Jena
OMAPAN, Bhubaneshwar, Orissa
Network of people's action group; has presence in all the mining areas in orissa. Their main focus is to organize small groups of affected people to put up a fight against the injustice due to mining. This is done through education awareness, building on the campaign to right to information
0674-555797
jenarajesh1972@rediffmail.com

84. Ms. Raimani Devi
Sukhinda, Orissa
From a village in Sukhinda mining area. A primary school teacher, activist also volunteers her time with a local voluntary organization working in the area.

85. Mr. Sisir tripathy
Angul, Direct Action Group
Activist working on the issue of Industrial pollution in Angul, NALCO area. Was part of a study which was undertaken to know the impact Industrial pollution on Human health, Animal health, Crop and Vegetation in Angul talcher region.
06764-37241

Nagpur

86. Dr. Dave
Director, NIMH (National Institute of Miners Health)

Pondichery

87. Mr. K.Raghavaman
Secretary
Pondichery Environment Protection Organisation
0413-248034

Pune

88. Dr. Abhay Shukla
CEHAT
B-1, Nilgiri Apartments,
Karve Nagar,

Pune- 411 052
Email: cehatpun@vsnl.com
abhayseema@vsnl.com

Raichur :

89. Mr. Somshekhar
Samuha# 08536-668213/14

Sirsi :

90. Ms. Aarthi Sridhar
Ashirwad
Nityanand Mutt Road
Sirsi-581402
Uttara Kannada District
0838-437076
Email: aarthis@vsnl.com

Thiruvananthapuram :

91. Mr. Jayakumar C.

Jayakumar is the coordinator of Thanal Conservation Action and Information Network. THANAL
PB No. 815
Kawdiar, Trivandrum-695003
Email: thanal@vsnl.com

92. Mr. K.P.Thadeus

Works with Greenpeace.
P.P.Vilakampu
Trivandrum
Kerala

93. Dr. R. Sukanya

She is a faculty member in Achutha Menon Center for Health Science Studies, Trivandrum and teaches epidemiology for the Masters in Public Health Students.
AMCHSS, Sree Chitra Institute for Medical Sciences and Technology, Trivandrum
Phone: 0471-524240
Email: sukanya@sctimst.ac.in

94. Ms. Usha S.

She is involved in environmental education among students and campaigns among farming communities on chemicals in agriculture.
Thanal
L-14, Jawahar Nagar
Trivandrum-40
0471-311896
Email: thanal@vsnl.com

Warangal :

95. Mr. P. Damodar

Sarvodaya Youth Organisation

He works with Sarvodaya youth organisation in Warangal, Andhra Pradesh. He is also the secretary of Warangal N.G.Os network. He is active in Consumer movements and farmer community issues. He is also involved in education and training programmes. Strong in motivating people, he encourages people to take up their problems to the government. This N.G.O. focuses on pesticides and environmental issues. He promotes organic farming and opposes the genetic engineering technology.

SVO

6-1-76/A, opp. Sridevi Theatre,

Hanamakonda- 506 001

Warangal, Andhra pradesh.

Ph: 08712 567084/ 08712 447076

Mobile: 98490 17614

Wayanad

96. Ms. Ambujakshi. M

Uravu

TKPTA

Wayanad-673577

0493-683244/603894

97. Ms. Laila. M. J.

Uravu

P.O TKPTA

Wayanadu, Kerala-673577

0493-603894/683244

98. Ms. Suma. M. K

Uravu

P.O: TKPTA

Wayanad-673577

0493-683244/607647

99. Mr. C.D. Suneesh

Uravu

P.O: TKPTA

Wayanad-673577

0493-683244/606969

USA

100. Dr. Elizabeth Guillette

University of Florida

32SW43 Terrace, Gainesville FL 32607

Email: guillette@zoo.ufl.edu

PARTICIPATING ORGANISATIONS

Centre for Resource Education

Hyderabad,
Narasimha Reddy.

Chintan Environmental Research and Action Group, Delhi

In: Bharathi Chaturvedi

Chintan is a Delhi based NGO working on environmental issues, particularly waste and toxics.

Address: No. 17, Jangpura Market,

2nd floor, above Om Hotel, New Delhi 110 013

Phone: 011-3381627/ 4314478

Community Health Cell, Bangalore

In: Dr. Ravi Narayan, Dr. Thelma Narayan, Dr. Rajan Patil,

CHC is voluntary health organisation and community health resource and policy centre working closely with the governments and communities to improve health and access to health care.

Also involved in training health workers to empower communities at grass root level.

Address: 367, Jakkasandra 1st Main, 1st Block, Koramangala, Bangalore-560 034

Phone: 080-5531518/ 5525372

Telefax: 080-5525372

Email: sochara@vsnl.com

Endosulfan Spray Protest Action Commitee, Kerala

ESPAC was formed at Perla, Kasergod by local farmers and the affected people to fight the aerial spraying of endosulfan and they have been very sucessful in bringing this issue to a larger media and people's attention.

Address: c/o Kajampady Nursing Home, P.O. Perla-671 552, Kasargod District, Kerala

Phone: 895088

E-mail: shreepadre@sancharnet.in

Greenpeace India

In: Nirmala Karunan, Navroz Mody, Ananthapadmanabhan, Divya Raghunandan, Bidhan Chandra Singh, Manu Gopalan, Sanjiv Gopal.

Address: J- 15, Saket, New Delhi- 110 017

Phone: 011-6962932/ 6536716

Telefax: 011-6563716

Email: manu.gopalan@dialb.greenpeace.org

Human Rights Law Network,

In: Deepika D'souza, Sweta and Sunil Scarai

Engineer House, 4 Floor, 86,

Bombay Samachar Marg, Mumbai-400023.

Ph: 022-2217078/2204948

Fax: 022-2220822/2227233

Janadhwari Yuva Vedika

opp. Masjid, Kumbarpet, Doddeballapur-561203.
Mr. Dayanand Gowda.

Mines, Minerals and People(MMP)

MMP is a national network of mining- affected communities and community groups and working with mining affected communities in any manner.

Address: 1249/A, Road No. 62, Jubilee Hills, Hyderabad- 500 033

Phone: 040-6505974

Telefax: 040-3542975

Email: mm_p@satyam.net.in

Nirmala Niketan

School Of Social Work
Mumbai

Occupational Health and Safety Centre, Mumbai

In: Vijay Kanhere, Dr. Murlidhar V. and Dr.Veena Murlidhar.

Address: 6, Neelkant Apartments, Gokuldas Pasta Road, Dadar(E), Mumbai-400 014

Phone: 022-766 0178

Email: _webmaster@ohscmumbai.org

Website: www.ohscmumbai.org

OXFAM

Dr. Unnikrishnan PV.

Palni Hills Conservation Council

R. Kanan.

A NGO based in Kodaikanal fighting for the cause of workers affected in Mercury factory of HLL.

Email: kanan@vsnl.com

Patancheru Anti Pollution Committee

A . Kishan Rao

Yashodhara hospital 12-5,

srinagar colony, Patancheru-502319, Medak Dist. (A.P.)

Doctor at patancheru, was involved in health survey around the area

Paryavaran Suraksha Samiti, Gujarat

In: Swati Desai and Michael Mazgaonkar

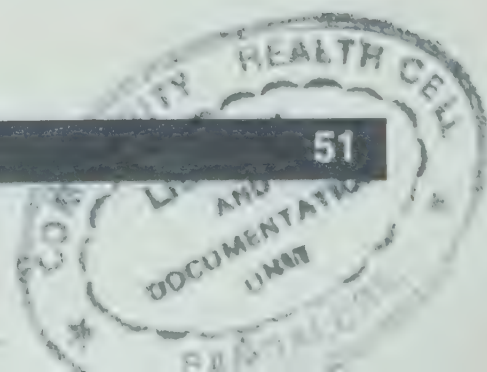
PSS is a voluntary self help organisation working primarily in South Gujarat on a variety of issues, including Industrial Pollution and Right To Know.

Address: 37/1, Narayan Nagar, Chandni Chowk,

Rajpipla-393145, Gujarat

Phone: 02640-20629

Email: pss@narmada.net.in



Periyar Malineekarana Virudha Samiti(PMVS) ,Kerala

Purushan Eloor

PMVS is a local group of activists fighting the pollution issue in the Eloor and Edayar belts of the River Periyar, where there are about 250 industries of all sorts mainly chemical.

Address: Periyar Malineekarana Virudha Samiti, Eloor Depot, Udyogmandal P.O., Kochi, Kerala.

Phone: 98460-13483

Roshni Nilaya School of Social Work

Social Work Department

Rural Reconstruction and Development Society

Gangi reddy. V

Sydapuram 524407Nellore Dist. (A.P)#08621-87096

Samaj Parivartan Samudaya

S.R. Hiremath

sr_hiremath@hotmail.com

sr_hiremath@rediffmail.com

Has been working on the issue of industrial pollution since a decade

Sambhavna

In: Nishant

Sambhavna is a Bhopal based voluntary organisation engaged in delivering holistic medical services to gas affected people. It has undertaken several pioneering initiatives in the field of community health, particularly in the context of communities affected by industrial pollution.

Address: Sambhavna, Berasia Road, Bhopal

Email: sambavna@bom6.vsnl.net.in

Samuha

Raichur.

Somshekhar

Samvada

303, II Floor,Rams Infantry Manor, Infantry Road, Bangalore.

Ph:080-5580585

In: Benson Isaac

Email: samvada@vsnl.net

Thanal Conservation Action and Information Network, Thiruvananthapuram

In: Usha S. and Jayakumar C.

Thanal is a community oriented organisation working on conservation issues and toxic related issues. Currently engaged in a community Right to know campaign in Eloor, Kerala and a proposal to move Kovalam toward a zero waste model.

Address: Post Box No: 815, Kawdiar, Thiruvanthapuram, 695 003, Kerala

Phone: 0471- 311896

Email: thanal@md4.vsnl.net.in , shreepadre@sancharnet.in

Tata Institute of Social Sciences, Mumbai.

Sheetal Goel

Dept of Medical and Psychiatric Social Work

Toxics Link, Chennai/Delhi

In: Rajesh Rangarajan, Madhumita Dutta

Address: 8, 4th Street, Venkateshwara Adayar, Chennai- 600 020

Phone: 044-4460387

Telefax: 044-4914358

Email: tlchennai@vsnl.net/tldelhi@vsnl.com

Institute of Miners Health, Nagpur.

Dr. S K DAVE, Director.

Pasumai Thayagam

Srinivasan, Vellore.

List of Publications and Audiovisual Material exhibited during CHESS-2

Publications:

Asia '92 Permanent People's Tribunal on Industrial and Environmental Hazards and Human Rights, Bhopal Session, India 19-24 October 1992. Other Media Communications, New Delhi, 1992.

Central Ground Water Board; Ministry of Water Resources, GOI, Study On Fluoride Pollution Of Groundwater Around Angul, Dhenkanal District, Orissa, 1993

FIAN; For The Right To Feed Oneself, Stripping The Earth ; Dossier on Coal Mining In Hazaribagh Jharkhand, India, Chotanagpur Adivasi Seva Samiti, Jharkhand / Delhi forum, New Delhi, 2001.

Mm&P Bulletin; The Official Organ of mines minerals & People, Bulletin No. 2 (Hindi), May-June 2002.

Nandira; Newsletters of Dhenkanal district Industrial Pollution Control & Citizens Action Project, Council of Professional Social Workers, Bhubaneshwar

National Coordination Committee, Jan Swasthya Sabha, What Globalisation does to People's health !, Towards the People's Health Assembly Book-1, South Vision, Chennai, 2000.

National Coordination Committee, Jan Swasthya Sabha, Whatever happened to health for All by 2000

AD ?, Towards the People's Health Assembly Book-2, South Vision, Chennai, 2000.

National Coordination Committee, Jan Swasthya Sabha, Making Life Worth Living !, Towards the People's Health Assembly Book-3, South Vision, Chennai, 2000.

National Coordination Committee, Jan Swasthya Sabha, A World Where We Matter !, Towards the People's Health Assembly Book-4, South Vision, Chennai, 2000.

National Coordination Committee, Jan Swasthya Sabha, Confronting Commercialization of Health Care, Towards the People's Health Assembly Book-5, South Vision, Chennai, 2000.

Orissa Environmental Society, Impact of Industrial Pollution On Human Health; An Overview, Orissa Voluntary Health Association, Bhubaneshwar, 1993.

Orissa Environmental Society, Impact of Industrial Pollution On Domestic Animals In Angul – Talcher Area, Department of Medicine, Orissa University of Agriculture & Tecnology, Bhubaneshwar, 1993.

Orissa State Pollution Control Board, Environment Status Of Angul-Talcher Area, Bhubaneshwar, 2000.

Paryavaran Suraksha Samiti, Affluent in Effluent; Investigating Contamination of Ground Water in Golden Corridor of Gujarat, PSS, Gujarat 2002.

Permanent Peoples' Tribunal, Charter on Industrial Hazards and Human Rights, Other Media communications, New Delhi, 1996.

Rao, Kishan., A., Patancheru... A Hell On Earth; A Saga of a People's Struggle against Industrial Pollution, A.V.R.R. Memorial Charitable Trust, Patancheru, Hyderabad, 2001.

Report of the Fact-finding Team : Toxics Link / Sarvodaya Youth Organisation / Centre for Research Education / Community Health Cell, The Killing Fields; Farmers deaths due to exposure to pesticides in Warangal District, Kriti Creations, 2002.

State (Prevention & Control Of Pollution) Board, Status of Environment Pollution In Angul – Talcher Area, Orissa and The Recommended Action Plan for Control Board Of Pollution, Bhubaneshwar 1990.

Audio Visual :

In Gods' Own Country; a film on Endosulfan

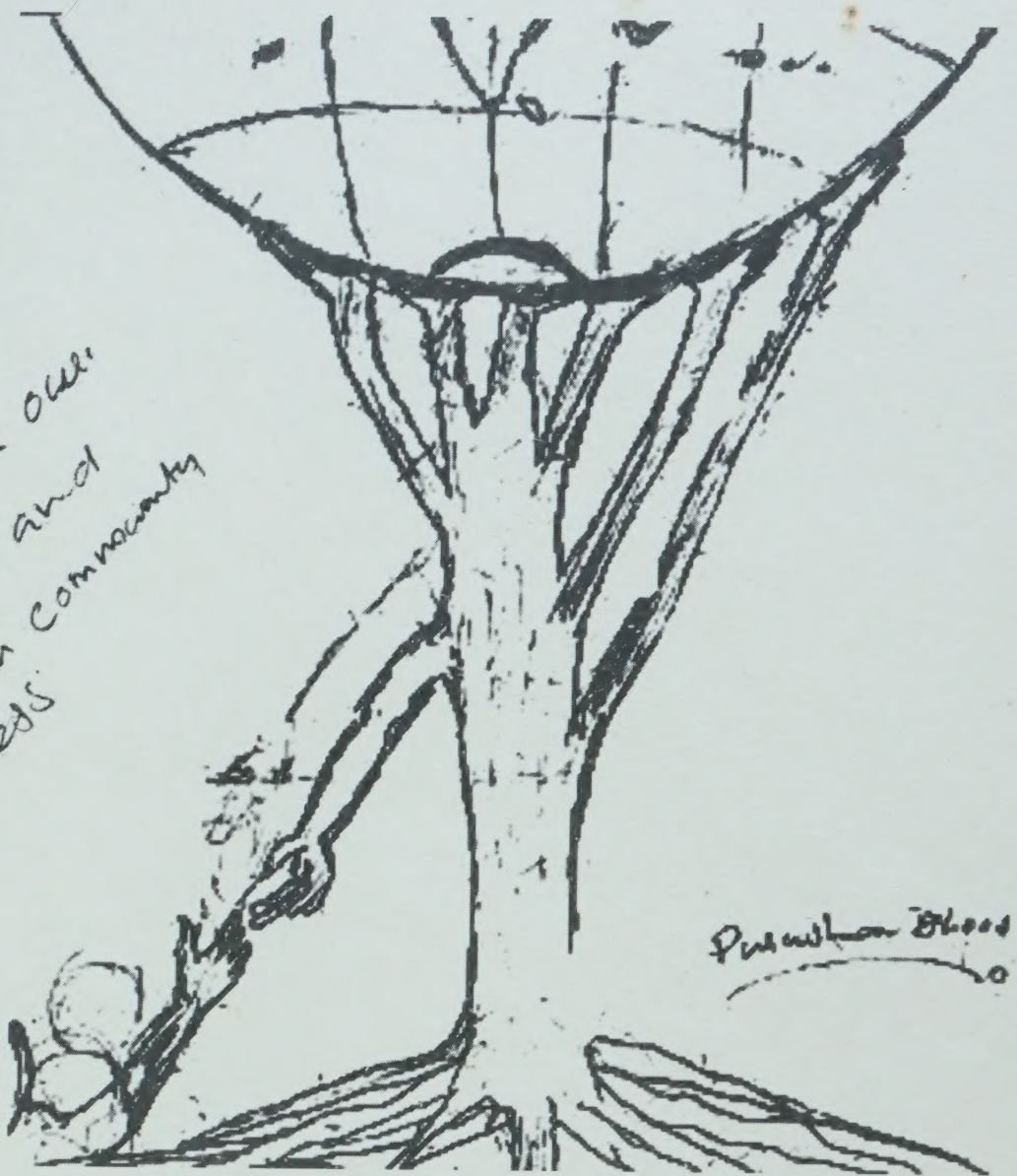
John Ritchie and Rob Bromley, The Nature Of Things, David Suzuki, Toxic Legacies (a film on elizabeth guillette's work)

Sunil Umarao's documentary on the struggle of villagers against industrial pollution of their fields in the Medak district of Andhra Pradesh, Companee Lochayee Gaddu Rojulu Thechayee (Coming of industries has brought hard times ...), Media for Mobilization and Action.

Reena and Partho's film; Whose River Is It Anyway, Documentation and communication cell, District Action Group, Dhenkanal, Orissa.

JOIN T HEARTS STOP THIS WAR

Let us share our
knowledge and
strengthen community
awareness



Puducherry 2000

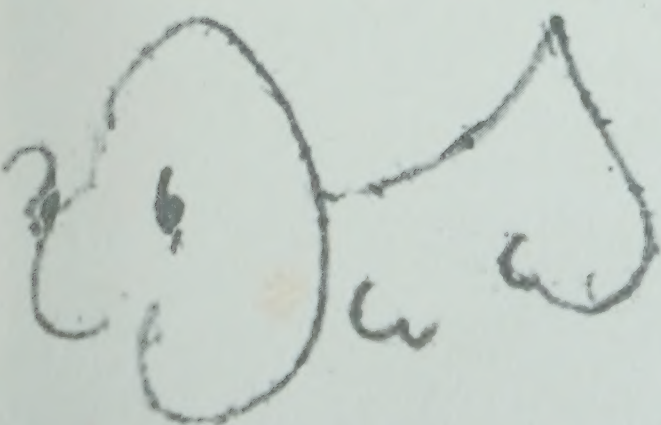
THE CHESSE WAS A USEFUL
EXPERIENCE, BIDDING BRINGING FLOW
TO THE JANS, AND ALL GOOD PEOPLE
AROUND CONCERNED ABOUT THE
LARGER HOME. THE DIVERSE GROUPS
AND PEOPLE AND KITH AND HOPE
AND DRAWING SKETCHES FOR WHY
FORWARD GOOD EXPERIENCE
TO LIVE

Tajam

Deepika

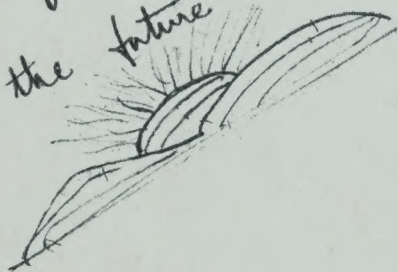
I look forward to
contributing in my
own little way!
Cheers!

Thangamma



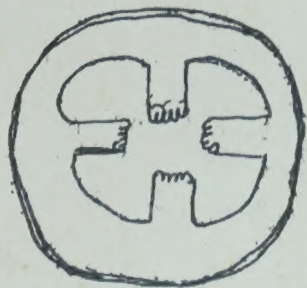
I was also thinking about
 this almost everyone here
 is going into a battle
 in the stage dynamic of youth
 cheers!!
 shanti shanti

I hope this strong Network
 will face any challenge
 in the future



Thanks for allowing people like
 me to share time with you

Sumit Kaur
 20/12



UNITY AGAINST
 POLLUTION

THE ENTERTAINERS!



—Diana

Come Let us a
 build a world
 where it is
 Joy to live

I feel humbled to be among
 so many warriors of the
 rainbow and proud to be part
 of this wonderful family of
 activists.

[Signature]